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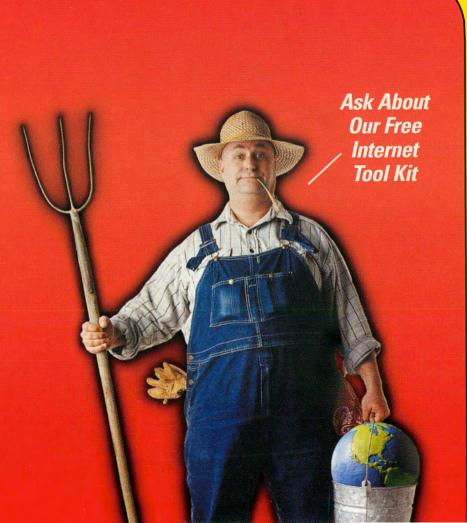A Guide to Making the Perfect iMovie.

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highlights

FOLLOW ME! This is a jail-break!

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I'M MELTING!

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how to

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The shopper-friendly kind: a Virtual Printer Store. You don't get here by car or bus. You come by phone or mouse instead. And you couldn't stand in a line, get lost in a crowd, or be ignored by a store clerk if you tried.

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the disc

YO! HOT DOG HERE! Man, wussup?
Doesn't he hear us?

We Pity the April Fools Who Don't Check Out The Disc!

highlights

Madden NFL 2000 Demo

Football season may be over in TV land, but it certainly can't stop you from enjoying a good game on your Mac. Sport your favorite team's colors and go head-to-head with any of the 31 current NFL teams, or play teams from the past (only the Broncos and Falcons are in this demo, though). Plus, enjoy the amusing banter provided by Madden himself and Pat Summerall (sorry, Madden's magic pen graffiti not included). So kick back in your undies, scrounge up a Gatorade tub, and let the pigskin fly.

Tactile 12000 2.0 Trial

We may just call ourselves DJ Addikt after we get phreaky spinning the wax on these virtual turntables. This super-fly, interactive, 3D DJ station will let you backspin, mix, manipulate, and cross-fade your MP3, QuickTime, and AIFF files on the fly. Perform various disc jockey tricks on your tracks directly from your computer keyboard and generate the ultimate dance party mix. Ch-ch-ch-check it out!

WELL, IF MY BUTT was smaller, this
would make a great Sit 'n' Spin.

Ferazel's Wand 1.0.2 Demo

Don your golden cloak and wave a mighty big stick in this magical mystery adventure from Ambrosia. An evil insect race has invaded and pillaged the peaceful Habnabits' homeland and taken control of their ziridium crystal mines. Without the crystals, Habnabit magic falls silent. As the last free Habnabit, you must travel through levels of underground caverns to fight evil and take control of the crystal mines, or forever hang your head in shame. Follow your nose!

DAMN, IT'S A GOOD THING I
didn't have beans for lunch!

Gravité 2.0

You won't find exploding bombs, particle blasting, or gorgeous 3D renderings to ooh and ah over, but this little freeware app has to be one of the coolest special effects we've seen on our computer screen in a while. This control panel app applies the laws of gravity to any file or folder you drag and drop across your desktop. Watch an icon swing with its own weight as you pick it up, or drop it and watch the icon plummet to its death at the bottom of your screen. Dig the sound effects, too.

WHOA, I THINK I'm getting folder
motion sickness...

NotOnePeepPt1.mov

WE KNOW there are a lot of Nikki
admirers out there, but this may be just
one step beyond the freak zone. What
fate lies in store for darling Nikki now
that new kid Narasu is on board? Find
out in Narasu's iMovie creation, *Not
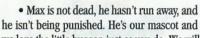One Peep*—this month's staff video.

editor's note

It's your magazine—I just work here.

Every month I get a pile of reader mail that never makes it into the *Letters* section. These are the strange insider questions people just have to know the answers to. Does Max have a girlfriend? (No.) What happened to the MacAddict Hour radio show? (Imagine, our parent company, sold Imagine Radio—hence, no more show). This month, I thought I'd take some time and address a few of your most common questions and concerns, and while I'm at it, I'll even clear up a few of the more popular rumors about the *MacAddict* gang. Here they are, in no particular order:

TAKING TIME to smell the readers.

• Max is not dead, he hasn't run away, and he isn't being punished. He's our mascot and we love the little bugger, just as you do. We will continue to let him scamper across our pages for the foreseeable future.

• We can't put Apple software on The Disc. No other magazines can either. Apple's legal department is just mean.

• No, you can't take Nikki to your prom.

• *MacAddict* is not becoming more serious or grownup. After all, they made me editor in chief, so clearly no one is taking this magazine seriously.

• We don't just sit around and play games all day. Cathy and Jen actually work sometimes.

• Apple does not own *MacAddict*. If it did, it would probably be nicer to us (then again, maybe not).

• No matter what Kris Fong says, we do not accept bribes.

• Executive Editor Dave Reynolds will continue to toy mercilessly with literary devices. We have no choice but to let him—it's in his contract.

• If you bump into Managing Editor Jenifer Morgan on the street, please refrain from quacking at her. She's very sensitive about the duck incident.

• The music on The Disc is for listening to while you use The Disc. If you want a copy of it, you can find contact information for the artists in the credits.

• If you submit an item for The Disc, it should not include nudity.

• Microsoft does not own Apple. Microsoft invested $150 million in Apple a few years ago, but that is a relatively small amount. In comparison, Apple grossed more than $2.3 billion last quarter alone (see *Get Info*, p16).

> If you submit an item for the CD, it should not include nudity.

• Yes, Executive Editor Dave Reynolds is a superhuman writing machine.

• The iBorg didn't break free, and it is not rampaging across the county. We simply had some setbacks, which you can read about on page 22.

• We will not send you a G4, PowerBook, iBook, or iMac for catching typos in the magazine.

• Yes, we realize that we make a lot of *Simpsons* references.

• Yes, SimCity 3000 really does suck.

• I've never been to prison (prison is different from jail, though).

• Yes, we know we goofed up on the speed of light in our December issue ("Mac to the Future," p29). It's really 186,000 miles per *second,* not miles per hour, and we thank you for your continuous stream of letters on the subject.

Staff Rants

Like sands through the hourglass, so are the days of the staff's lives. We're just kidding, of course—none of the staff really has a life.

Narasu Rebbapragada
Associate Editor, Killer
Q. *What should readers know about* MacAddict *that they probably don't?*
A. We held an intimate memorial service for our dearly departed iBook. Sniff.

Q. *What should AOL's next purchase be?*
A. Roswell, New Mexico. Its inhabitants are accustomed to onslaughts of silver, spinning discs.

David Ross
Art "inserts quotes into every name and title" Director
Q. *What should readers know about* MacAddict *that they probably don't?*
A. That *MacAddict* is actually the flagship for a new corporate entity owned by Executive Editor Dave Reynolds. It's based loosely on Martha Stewart's empire, but with a little tae bo thrown in. We're all gonna be rich—rich, I tells ya!

Q. *What should AOL's next purchase be?*
A. How 'bout the U.S. Government? We'll even throw in Puerto Rico!

Ian Sammis
Associate Editor, iBook giver-awayer
Q. *What should readers know about* MacAddict *that they probably don't?*
A. Well, they'd probably hate us for our clandestine efforts to brainwash them into becoming a mindless legion that will eventually lead us to world domination. Fortunately, thanks to the brainwashing, they'll all read this as "how much fun it is to work here" or some other platitude.
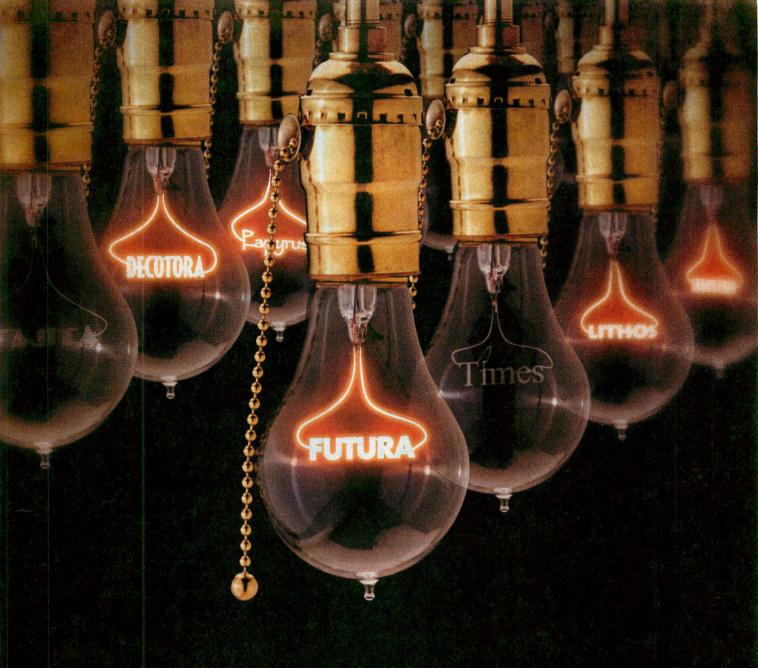
Q. *What should AOL's next purchase be?*
A. Starbucks coffee—that'll give AOL a crushing grip on the source of Microsoft's power.

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Mac OS 7.5.5– 9.0.

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www.extensis.com/ma	800.796.9798	

letters

Write on, you hard-core Mac fans! We can take it.

This Month

GET ON, GET ACTIVE. Talk to us and other Mac addicts at the Web site.

WE THOUGHT HE WAS ON A BENDER

I bet your cover is wondering where Max went. Well, I kidnapped him and am slowly torturing him by forcing him to use an eMachine. You may have Max back if you send me your entire network of Macs, including all the G4s I'm sure you have.—CABBO

WE DOUBT IT

As a shareholder of Apple Inc., I applaud the board of directors' decision to give Steve Jobs a Gulfstream V jet. But since you have access and can get to the bottom of important questions, I just have to know

WILL MAX ESCAPE? Find out next time, same Mac time, same Mac magazine...

which Steve says is better...riding in the Gulfstream V or running Terminal Reality's Fly! on a G4. It's got to be a tough call. —STEVE PRUNEAU

HIC

Maybe you or your employees enjoy drunkenness and drugs and whatever else, but until you can leave the filthiness out of the magazine, you can keep it! The world is crude enough.—PAM GREGORY

PANTS?

With all the new products that have hit the market trying to cash in on the iMac craze, I thought I'd come up with a list of products that likely *won't* use multicolored translucent plastics. Here it is—feel free to add your own.—DANNY WRIGHT

1. Port-a-potties
2. Septic tank trucks
3. Diapers
4. Don Corleone's trunk lid
5. Manhole covers
6. Dressing room doors
7. Bedpans

RECENTLY SIGHTED ⊙

One day, while contemplating the usefulness of the Pentium III processor, I realized what a useful slogan "Intel Inside" is. Rushing to my G3 266MHz Macintosh, I quickly—in four or five hours—put my feelings into what I feel should be the new Pentium III processor logo. I have included the final product as an attachment. I hope you like it! —iELIOT SIMCOE 2000

THAT'S WHERE WE keep ours, too.

NOBODY'S PUYERFECT

You guys mentioned MacPuyo in "20 Killer Shareware Games" (Feb/00, p40). However, I'm disappointed you didn't do your research. The guy who wrote PuyoPuyo for the Mac didn't write MacPuyo. His name is John Stiles and he deserves proper recognition. Soon after he wrote PuyoPuyo, the trademark owners of the name (which belonged to a Sega game) asked him to rename it. It became Skittles, a game far more sophisticated, well made, and addictive than MacPuyo will ever be. Recently he introduced Skittles 2, a ridiculously addictive game I am proud to own. If you like the concept of MacPuyo, then you'll love Skittles (http://www.skittles2.com).—MAX T-M

AW, SHUCKS...

How come you people rule and most people I know wouldn't be able to find their butt if you handed it to them?—THOMAS TELFORD

HALLELUJAH!

I have read your two most recent issues and feel you are the people to turn to. I was an Intel PC user for five years. I even picked on a friend who was a dedicated Mac user. Only after using Macs at my university did I discover my crime. I am writing this because I feel myself unworthy of purchasing a superior Mac without first confessing my sins to fellow Mac lovers. I am saved, thanks to all those Mac diehards who fought Microterror and kept Apple alive. I will gladly join the fight.—ADAM ROGERS

ENNOYED

I was recently checking out one of the many Mac-only catalogs (which I receive every blasted day), when I came across a product that left me a bit miffed. There, among all those beautiful digital cameras and camcorders, was an eMachine eOne/433! Ptooey and double ptooey! I spit at the infernal imp, which has crept into the pages of one of my favorite Mac catalogs! What gives? I am both shocked and amazed. I need to be held. Kris, oh Kris...—JUAN R. LEON

I Guess Maybe We're Sort of Offended

Your articles are so vague that they're worthless, and you already know how I feel about The Disc. What a waste of money. I will not be renewing my subscription! Thanks for nothing!—JOHN O'DONOVAN

That's Lantastic!

Hey guys, I just thought I'd write and thank you for the sweet layout of the perfect LAN party in one of your recent issues. Here's how ours turned out:

Number of attendees: 8

Number of games: 2 (Myth II and Starcraft)

Number of sodas: 48 (one 24-pack Dr. Pepper, one 24-pack Pepsi, all consumed)

Number of pizzas: Three large Chicago-style pizzas from Papa Murphy's (huge ones)

We played a total of some 10 games of Myth II and around 15 games of Starcraft over a period of five hours.
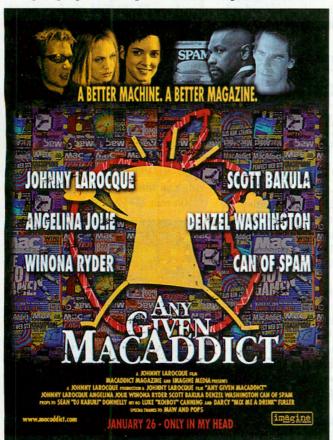
Preparation was easier than setting up a new iMac. We just ordered the pizzas, grabbed the drinks, and installed copies of the games on eight Rev B blueberry iMacs.

Thanks for the layout, *MacAddict!*—ROBIN WELSH

How About Fruit Flies?

I was reading the March issue and got to Kris Fong's suggestion that Steve Jobs eat a bug for every problem reported in OS X (*Editor's Note*, p12). The first thought that popped into my head is that Steve is a vegetarian and this would pose some sort of moral dilemma. Then it hit me. This would make a great letter to *MacAddict*, funny and informative all at once.

So as part of the research for my ever-so-witty letter, I searched Sherlock for "ingesting bugs" to come up with some kind of figure for the number of

WHO DOES THE CAN of Spam play? Poster sent in by Johnny Larocque.

insects we consume without even knowing it, and came up with this site: http://www.hollowtop.com/finl_html/finl.html.

After the initial shivers passed, I got a little curious and took a look around. A popular sports magazine once published a recipe that calls for 200 grasshoppers... in its swimsuit edition! Bugs really *are* high in protein. An insect cookbook? Get out of town!

To top it all off, the site was created on a Macintosh!

I guess there is such a thing as too much information.—ROBERT KALLMEYER

WHAT'S THAT SEEPING OUT OF YOUR EAR?

A coworker handed me the February issue of *MacAddict* sort of as a joke. I don't even have a functioning Mac. Other magazines for geeks are overwhelmingly full of themselves and cause people's brains to turn to tapioca trying to understand the articles, or so boring that readers slide into a semiconscious state and start writing applications for NT.

Well, damn it! You've raised my expectations for magazines and I have to cancel all my other subscriptions now. This is the best magazine I've ever read, and now I'm a subscriber.—CARRIE MEYER

HE'S THINKING (WE THINK)

For years I have lived in the dark.
Looking at those fortunate fools from afar.
Yes, those fools who had computers other
    than the Performa 200.
Now I laugh, laugh! Ba ha ha ha ha ha!
I got a TV-video card and a Sega Dreamcast!
    Ba ha ha ha ha ha!
Look at the graphics! *Look*! Ba ha ha ha ha
    ha!—MIKE JOHANOVIC

YES

How come I'm never in the *Letters* section? My letters are creative and funny (at least I think so), and you've printed not a one. Why? Are you out to get me?—BRIAN MOLONEY

WAS IT A MICROSOFT FTP SITE?

Last night, I was trying to use Anarchie Pro to connect to a friend's FTP site. Apparently, something went wrong, and I got the weirdest alert I have ever seen in

IT REQUIRES AT LEAST one Mac.

over nine years of using Macs: "Anarchie Pro; Failed to startup (-201, Not Enough Hardware Error)." Now if you're telling me that my G3's setup doesn't have enough hardware to handle connecting to an FTP site...what is this world coming to?!—JOSH HOROWITZ

THINK AGAIN

Just finished reading your "spiffy" March 2000 issue, and I'm fairly happy with what I see. But in "20 20-Minute Mac Projects" (p32), the available built-in memory in Project 8 is 121MB. It's an odd number! It's not possible! How does this happen? I thought I was all-knowing! Please help—my confidence has been shattered!—WILLIAM HOLMGREN
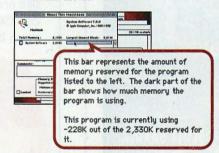
We set up a cache disk using almost 7MB. The amount available is 121MB, but the computer has 128MB total.—ED.

JUST NAME IT PAT

I am saving my lunch money for my own G4 supercomputer. To avoid offending my new friend with an inappropriate name, I need to know how to tell if a Mac is male or female. Does it have something to do with odd or even serial numbers? By the way, what does one feed a supercomputer?

"Mac Mac." "Who's there?" "Enough." "Enough who?" "Enough power and style to make a PC wet its processor."
—ROBERT GLOVER

I GOT THIS MESSAGE while I was using Balloon Help to check how much memory I could allocate to QuickTime Player on my old Performa 637CD (8MB of RAM). Odd. Very odd.—DEREK DOHLER

'TIS NOT A MAN...

David Reynolds is a machine and I love him. Please change the name of the magazine to "David Reynolds." Please change the motto of the magazine to "It's a better magazine because we have a better David Reynolds." I am very serious about this. David Reynolds is mighty.—DANIEL J. BARKAN

FAQ ATTACK

I think we need to stage a coup for the Blizzard Entertainment government. If you

go to its FAQ and look at the questions about beta releases, it answers all the questions with healthy, informative explanations. All but one, that is: "Can I participate in the beta with a Macintosh? No."

Blizzard has gone too far. I can understand the company might be insane enough not to have the Mac beta open, but it doesn't even bother to give an explanation! It's time to hire some thumb-breakers!—LEE

The Zip Disc is used with your electric drill. It consists of steel wire suspended in a plastic disc which means only the edge is abrasive. Deals with a rust spot to a long scrape.
092.221 £8.95 each

Warning! Not all Zip disks are compatible (found this in a British vintage auto parts catalog).—FRANÇOIS DUBEAU

JUST DON'T FRAG HER

I am writing you from my wife's Christmas gift to me that finally arrived last week—a brand-new G4 450. Yeah, the fast one with the DVD-RAM. I'd tell you that it was really fast, but compared to what it replaced—my trusty 7100/80—well, you get the idea.

Now how many wives would give that kind of gift? But I can't tell what message it sends. She either *really* loves me or she wants some time to herself, knowing that I would spend long hours in front of my new computer. I just finished fragging some blokes with the Unreal Tournament Demo in the den while she is in the living room right now with her nose in a book.

Oh yeah, she loves me.—TOM ELDER

YOU KNOW YOU'RE A MAC ADDICT WHEN...

...you refer to those people who don't care one way or another about the Mac-versus-PC war as nondenominational.—PAUL THOMPSON

...you warn friends to pet your Mac with the vent slots, not against.—KURT SHEFFER

...your braces are the closest colors your orthodontist had to the flavor of your iMac.—WES BAEHR

get info

It's a Board! It's a Plane! It's Apple's Q1 results!

Money Goes In, Macs Go Out

iBooks, iMacs, and one gigantic Internet IPO net Apple another wad of cash

There was a time when Mac users dreaded the months of January, April, July, and October. As little as two years ago, these were the months during which Apple's financial team would slink out with sheepish looks on their faces after announcing yet another quarter of startlingly poor financial results. Our Mac-hating (or just Mac-indifferent) friends would then resume asking the despicable questions: "When is Apple going out of business?" or, worse, "How on earth can you lose a *billion* dollars, anyway?"

Fortunately, those times are far behind us. Apple's been posting profits for over a year, now, and in January they finally announced that they cracked the two billion dollar barrier which has eluded them since the end of 1996. Apple sold over one and a quarter million Macs in the last three months of 1999, leaving them with revenues of $2.34 billion. After all the usual financial fiddling (sales from Apple's apparently near-infinite supply of ARM stock, set-asides for executive bonuses and taxes, and restructuring costs) Apple was left with a healthy profit of $183 million.

Apple's stockpile of cash and short-term investments continues to grow—with the recent increase in Akamai's stock price (Apple's $12.5 million investment in Akamai has centupled into $1.25 billion), Apple holds over $5 billion in its coffers. We're not sure what they're planning to do with the money, but this is a remarkable amount—even larger than NASA's 2000 space science budget.

Gross margins (the difference between the amount of money Apple gets through sales and the amount they spend to build, market, and sell their products) slipped slightly to 25.9 percent. This is still quite high by industry standards—Dell's margins have hovered around 21 percent throughout 1999.

The iBook in particular was a great success during the last quarter of 1999. Apple sold 235,000 iBooks, making the colorful little clamshell the number one-selling notebook, according to PC Data. PC Data also reported that the strong numbers drove Apple to a 10 percent share in the retail notebook market for the quarter. Demand was apparently so fierce that some resorted to theft to get their hands on one of the two-tone wonders—the iBook controlling our hapless iBorg was unceremoniously removed from our offices just before Christmas (see "iBorg Interrupted," p22). The iMac series also performed well in the market—over 700,000 sold in the last quarter.

Apple's board evidently decided to reward iCEO Jobs for his performance in grand style.

STEVE JOBS AND HIS BOOTY...on top of a pile of gold.

The board granted Jobs an astonishing 10 million options on Apple stock, at a strike price near $99. They also gave him a Gulfstream V aircraft valued at $40 million, prompting much office speculation as to his possible destinations and a burst of jealous outrage from our Managing Editor and private pilot Jenifer Morgan.—*IS*

Commentaries on the Gain

The generosity of Apple's compensation to Steve Jobs (10 million options and a $40 million jet airplane) led to some rather strange utterances by Jobs and his predecessor, Gilbert Amelio. Here's the cream of the crop:

GIL THOUGHT OF THE TRANSLUCENCY, TOO: "In the spring of 1996, I wrote a white paper on Apple's strategy. That's the strategy they're pursuing now." —*Gil Amelio, explaining to* Business Week *that Apple's turnaround should be credited to him.*

IT'S AN AIRPLANE, NOT A FRIGGIN' CAPPUCCINO MACHINE: "They thought of this, and it's something I'll probably actually use, and it's something I'd probably never have bought myself." —*Steve Jobs, on his Gulfstream V aircraft to the* New York Times.

Where's He Going in That Gulfstream, Anyway?

Apple's Gulfstream V gift to Jobs left many of us wondering just where he's planning to go. Pixar is an obvious choice, but since it's only about 50 miles from Apple, and since there's no airport in Richmond, it seems a bit unlikely that he'd bother with the flight unless Interstate 880 was really, really crowded. The Gulfstream V's no ordinary jet, either—it gives Jobs the ability bring his reality-distorting power to nearly two-thirds of the planet without refueling.—*IS*

GULFSTREAM V FACTS AND FIGURES

MAXIMUM RANGE: 7,467 miles
LONG-RANGE CRUISING SPEED: Mach 0.80 (529 mph)
MAXIMUM SPEED: Mach 0.885 (585 mph)
MAXIMUM ALTITUDE: 51,000 feet
FLAVOR: Unknown
INTERIOR: To be designed by Jobs
COST: About $40 million
COST OF MINIATURE PEWTER MODEL: $50
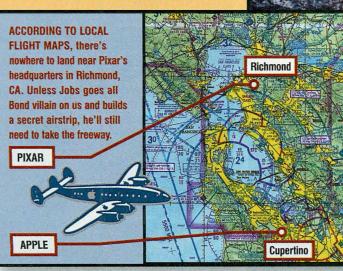
ACCORDING TO LOCAL FLIGHT MAPS, there's nowhere to land near Pixar's headquarters in Richmond, CA. Unless Jobs goes all Bond villain on us and builds a secret airstrip, he'll still need to take the freeway.

PIXAR

APPLE

Richmond

Cupertino

THE PLANE EXPANDS the reach of the Reality Distortion Field enormously—it now covers most of the planet. Only Africa, India, most of Australia, and parts of the Middle East remain sane and undistorted.

Life Is But a Stream

MetaCreations drops graphics products, focuses on MetaStream technology

Life is anything but merry for MetaCreations employees and enthusiasts. The company announced in early February that it was divesting itself of its commercial applications to focus on MetaStream—what the company calls its "e-commerce visualization solution." MetaStream is a technology which allows you to view 3D objects via a network stream. In practice, it works much like QuickTime VR. This restructuring leaves the company's classic graphics apps in the lurch, including Bryce, the newly revamped Painter 6, and the just-on-the-shelves 3D application Carrara 1.0. MetaCreations will continue to develop, support, and sell all of its graphics packages—that is, until it can find a company willing to buy them. Shortly after announcement of this news, MetaCreations' stock climbed 20 percent over two days to a 52-week high. Apparently, investors were celebrating MetaCreations' metamorphosis from a real company with the goal of making real money to an Internet company with the prospect of losing real money.

One look at the balance sheet shows why MetaCreations made the decision to get rid of its graphics products and focus on MetaStream. At the current rate of loss, the

GRAPHICS APPS FOR SALE! MetaCreations puts Poser, Bryce, Painter and all its other apps on the block.

company had about a year before its liabilities exceeded its assets—a decidedly unhealthy state of affairs for any company. During the fourth quarter of 1999, MetaCreations lost $39.5 million. In contrast, MetaCreations realized $10.2 million in revenue from licensing MetaStream in 1999—a big jump from the $3 million realized in 1998. With the upcoming release of MetaStream 3.0, it appears that MetaCreations is hoping to trim down to form a svelte Internet company with a single focus—and that's not graphics software.—*DR*

Shareware Pick of the Month

Earth Browser 1.0.3
PRICE: $19.95
URL: http://www.earthbrowser.com

This shareware widget is simply amazing, but not from a practical standpoint. Instead, Earth Browser is more of a techie toy—it shows you the Earth as it is from space, complete with the current cloud cover and the latest weather, earthquake, and volcano information. Earth Browser doesn't just display a static image, either—it is a dynamically generated 3D object that you can spin in any direction. One bonus feature is that you can access the live-link Web cams from Earth Browser by clicking on a camera link. Here's a look at its interface, below.—*DR*

FIND EARTH BROWSER 1.0.3 on The Disc.
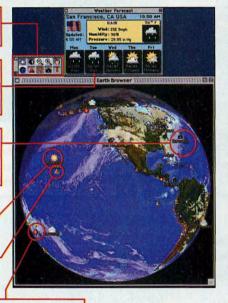
Toolbar: Control Earth Browser by using this set of ten simple tools.

Weather: Want to know the weather in a given city? Earth Browser can tell you.

Web cam: Earth Browser has links to several Web cams around the world—and they're just a click away.

Current conditions: Sure looks sunny in Honolulu. Jerks.

Volcanos: Earth Browser shows what's up with active volcanoes.

Earthquakes: That really *was* the earth shaking—not just the guy upstairs doing tae bo.

Update Watch

ACCESS THESE UPDATES via our Web site.

AirPort, X Server, and Unreal Tournament all get upgrades

As always, the last month saw a minor flood of updates, patches, and tweaks from Apple and other vendors. Here are a few worth noting.

AirPort 1.1—Allows a Net-connected machine with an AirPort card to serve as a base station. (http://asu.info.apple.com)

Mac OS 9 Audio Update 1.3—Modifies a bug that made audio annoyingly lag behind video in DVD playback; audio now annoyingly leads video. (http://asu.info.apple.com)

Mac OS X Server 1.2—Allows OS X Server to run on G4s and on blue-and-white G3s. (http://asu.info.apple.com)

Madden Update 1.0.1—Fixes a variety of nasty bugs in Aspyr's football simulator. (http://www.aspyr.com/supp000d.html)

Unreal Tournament 405b—Fixes map and skin download problems with the Mac version of Unreal Tournament. (http://www.westlakeinteractive.com/download0014.html)—*IS*

New for the Mac

Nomad II
Creative
http://www.creative.com, under $400

What the Mac world needs now is another MP3 player—and Creative Labs (maker of the PC-based SoundBlaster sound card series) has heard the call. The Nomad II, which should be released by the time you read this, has 64MB of memory (enough to store a reasonable amount of music), upgradable firmware to allow future audio format compatibility, a USB connection, a flash memory slot, an FM tuner with 20 preset radio stations, and the ability to record audio. The little audio player also has its own Web site with updates and other nonsense at http://www.nomadworld.com.

Webcam Go
Creative
http://www.creative.com, $149

It's a Web cam! It's a digital camera! It's a stylish, sleek paperweight! Scratch that last suggestion unless you want to spend $149 for a high-tech rock. The other two, though, apply to Webcam Go—a combination Web cam and digital camera. As a Web cam, Webcam Go works as you would expect, providing a video source for streaming video, spy cams, and the like. As a digital camera, Webcam Go's 4MB of internal memory lets you snap 90 pictures at 640 by 480 or 200 at 320 by 240—not bad for a multifunction device.
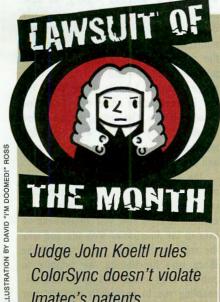
FireWired
Wired, Inc.
http://www.wiredinc.com, $299 (analog to uncompressed) or $499 (analog to DV format)

Now *this* is a cool device for video junkies who just won't let go of their analog video cameras but want to bring their video into their G4s—the FireWired analog-to-DV converter. Besides being a must-have DV peripheral, It has a cool form-factor, too, complete with a flexible rubber-like set of flaps that enclose the ports. The FireWired (or The Pod, as we've come to know it) comes in two flavors: the $299 unit, which turns analog video into uncompressed video; and the $499 unit, which turns analog video into a compressed DV format stream.—*DR*

AOL's Quest for World Domination

Welcome! We own you now!

A OL just made a huge stride towards catching up in the ongoing game of corporate Illuminati that seems to have swept the financial world during the last few decades. On January 10, it announced its purchase of Time Warner, another major player in recent years. AOL now controls a star-tling array of companies (nearly every company except ours, Microsoft, Apple, and that strange guy's business which sells marbles and jockey shorts down the street). To give you a sense of the scale of this terrifying threat, here's the AOL food chain.—*IS*

COLUMBIA HOUSE

WB

CD NOW

COMEDY CENTRAL

SPINNER

WARNER BROS.

FINE LINE

CINEMAX

ICQ.COM

NEW LINE CINEMA

HBO

COMPUSERVE

TIME WARNER

CNN

AMERICA Online

NETSCAPE

TIME

TIME WARNER CABLE

WCW

TURNER ENTERTAINMENT GROUP

ROAD RUNNER

ATLANTA BRAVES

TNT

ATLANTA THRASHERS

CARTOON NETWORK

TCM

TBS SUPERSTATION

Legend:
- FILM
- MUSIC
- SPORTS
- INTERNET
- CABLE
- TELEVISION
- PRINT

LAWSUIT OF THE MONTH

Judge John Koeltl rules ColorSync doesn't violate Imatec's patents

Imatec v. Apple: Dismissed

T wo years ago when Imatec, Ltd. filed suit against Apple, claiming that ColorSync violated patents held by Imatec, the words "frivolous lawsuit" weren't far from anyone's lips. In late January, Judge John Koeltl of the US District Court for the Southern District of New York agreed and dismissed the case. According to Apple, Judge Koeltl ruled that Imatec didn't have the patents in question, and even if it did, ColorSync didn't violate them.

Predictably enough, Imatec Ltd. is struggling on. Denouncing the result, Imatec's President, CEO, and Dictator-For-Life* Hanoch Shalit commented, "The dismissal of our Complaint leads me to question how well the presiding judge understood the highly technical issues involved." Proving

*Imatec's life, that is.

that, if nothing else, Imatec is an effective clause-generator, Shalit went on to say, "As we continue to advance various technologies we intend to prove to the financial community and to the public that we are an innovative and effective company, despite this unfortunate decision in our suit against Apple, which we hope will be reversed."

Imatec promptly stated their intention to appeal the ruling. As the lawsuit was essentially the only prospective source of revenue for Imatec (their largest source of income so far has been debt-forgiveness), the setback was promptly reflected in Imatec's stock price. In the two days after the ruling was announced, Imatec fell 65 percent from 62.5 cents to 21.88 cents per share.—*IS*

get info

iBorg Interrupted

ADB-I/O errors and theft plague MacAddict's *beleaguered mobile robot division*

Wasn't the iBorg (that robotic Web cam we premiered in the January issue) cool? You could control it from our

SOME DEGENERATE SAVAGE cruelly yanked the blueberry brains from our defenseless iBorg.
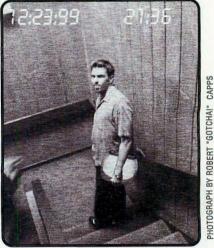
FOR ONLY $1,800 Apple was willing to send us an all-new iBook. But does this mean we'll have to paint the iBorg orange? (Don't give us any of your semantic gripes either...have you ever asked a salesman for tangerine spray paint?)

Web site, drive it around our office, and spy on us 24 hours a day. We hope you had a chance to get out all your voyeuristic impulses, because if you didn't...man, did you miss out.

Okay, we're lying. We confess—you couldn't ever get to the iBorg online, no reader ever controlled it, and it only fully functioned for a day. But take heart—the little kritter didn't burn up in the atmosphere of some distant planet, nor is it lost in a metric conversion black hole. The iBorg exists, and you will be able to drive it and its Web cam around the offices of *MacAddict* (via Macaddict.com) by the time you read this. We just had a few small setbacks, that's all.

Our first delays were the result of some funky ADB-I/O problems that Ian *claims* were unavoidable. He finally solved the problem with some clever scripting and a

WE CAUGHT *PC Accelerator* **Editor-in-Chief Mike Salmon on an Imagine surveillance camera toting a new iBook.** *PC Accelerator* **labeled the iBook its Fantasy Frag of the month. Fantasy Frag, or just Fantasy? We know the truth, Mike.**

Tic Tac, and the iBorg was ready to go one week before Christmas. That's when true disaster hit. Some fiend sneaked into the *MacAddict* offices between 9 and 11 at night (the hours we allow Ian go home and sleep) on December 23, and made off with our Blueberry iBook. The iBook was the heart of the wireless (well, untethered to anything but itself might be more appropriate—no one who has ever seen it would call it "wireless") iBorg. We have our suspects—primarily our recently departed Features Editor (we *won't name* names to protect Nikki...oops), and one of the repressed, beer guzzling PC game magazine editors—but thus far we can't prove anything. Luckily, Apple saved the day by sending us an all-new Tangerine iBook. (It was like getting a whole new iBook for only $1,800.) We have a few additional security measures in place now, and the iBorg is nearing completion.

Ian promises to get the little runt up and running by early February, and you'll read this in late February at the earliest, so right now, you should head on over to the *MacAddict* Web site and take the rejuvenated iBorg for a spin. If the iBorg isn't functioning, we promise to publish Ian's email and home address, enabling you to personally register your ongoing frustration.—*RC*

Twins Separated at Birth?

There's an uncanny resemblance between the famed disk doctor Peter Norton and Dr. Drew, the host of the popular *Loveline* series of teen TV and radio shows. Coincidence? We think not! In 1990, Peter Norton sold his software company to Symantec, which still produces the popular Norton Utilities and AntiVirus applications. Dr. Drew Pinsky sold his medical opinions (and his soul) to MTV. One fixes hapless hard drives, the other hapless hearts. After closely scrutinizing Drs. Norton and Drew, we found some indisputable similarities between the two.—*NR*

Peter Norton	Dr. Drew
Celebrated disk doctor	Celebrated TV doctor
Concerned with your hard drive	Concerned with your sex drive
Diagnoses embarrassing viruses	Diagnoses embarrassing viruses
Cures your hardware	Need a real doctor for that one
Master of self promotion	Master of self promotion
Diagnoses can be vague	Diagnoses can be vague
Combating culprits half his age	Combating culprits half his age
Waiting to appear on ZDTV	Appears on MTV
Strong silent type	Not quite
Patron of the arts	Patronizing
Patches fragmented disk drives	Patches fragmented psyches
Cohost is a wrench	Cohost is a model
Reverses catalog B-tree errors	Um, skis and reads by the pool

Before Columbus, sailors stuck pretty much to the same old standard routes, fearing they would fall off the edge of the world and be eaten by sea monsters. Fortunately, Christopher didn't believe in "standards."

WHAT'S YOUR EXCUSE?

Once you see everything Canvas™ 7 offers, the old standards will begin to look merely standard. With its ingenious Sprite technology, vector illustration flows seamlessly into image editing and typography. So you can create brochures, diagrams, and retouch photos within a single creative application. Or build a pixel-perfect web page with optimized web graphics, mouse-overs and animated GIFs — no extra utilities required, and no limits to what your imagination can explore. It's time you experienced the thrill of discovery. Order Canvas 7 today at www.deneba.com/macaddict. Or call 1.800.7DENEBA for the reseller nearest you. With hundreds of other features, 30,000 clip art images, 2,450 fonts and a new, unbelievably low price, there is no excuse.

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DENEBA CANVAS™ 7

No comparison.

DENEBA

scrapbook

It's not quite the Temple of Doom—but it's close.

Exploring Internet Explorer 5
by Cathy Lu

Say what you will of Microsoft (normally we wouldn't stop you), but when it comes to browsers, the evil empire seems to have taken to heart the needs of Mac users. Tasman, a new, lightning-fast rendering engine, backs Internet Explorer 5. Now if only it was crashproof, too. (Note: The version shown below is a beta.)

Customizable Navigation Buttons
A wise supermodel once said that a smart outfit is never complete until you accessorize, and we'd like to think the same philosophy holds true for browsers. Now you can add the buttons *you* want in the navigation bar—Mail, Favorites, Search, Images, and so on—by simply going to the Customize Toolbar option under View and dragging them onto the toolbar.

Favorites
IE 5 makes storing links to your favorite Web pages easier by letting you organize them with folders and drag and drop links in there. The Favorites toolbar runs along the top and basically rehashes the Favorites tab in the Explorer bar—just in case you can't get enough of your fave sites.

Media Bar
This toolbar gives you easy access to QuickTime and other streaming media content by storing links to your favorite broadcast stations or locally saved MP3 media files. Blasting music and annoying coworkers has never been so easy.

History
Access the History of sites you've visited via a tab on the side of the browser window. The downside to this, of course, is that your evil, lurking boss can, with one "accidental" click, check up on whether you've been doing personal surfing on company time. (The editorial staff of *MacAddict* neither engages in nor condones the aforementioned activity.)

Collapsible Navigation
Minimalists rejoice! This button allows you to kill all of the navigation tools crowding the top of the browser, yet keep basic nav buttons intact.

Search
The new interface makes snuffling out info on the Web easier. The browser performs a search using the default search engine, then allows you to repeat it with a different engine from the pull-down list.

Scrapbook
A kind of virtual photo album, Scrapbook is a brand-new feature in IE 5. Drag a page into Scrapbook, and IE 5 takes a snapshot of that page and preserves the information on it. That means printing out news stories, e-commerce receipts, electronic greeting cards, horoscopes—pretty much any online item you want to save—is a thing of the past.

Page Holder
Introduced in IE 4.5 for Mac, this feature is a wet dream come true for people who loathe multiple browser windows and Back button inefficiencies. Page Holder stores a page containing a list of links in the left window and lets you browse those links in the main window, eliminating the tedium of toggling between pages.

Customizable Color
IE 5 lets you change the color scheme for buttons and bars to match your iMac or even your PowerBook—use any fruit flavor, plus Bondi blue, graphite, and fashionable black and bronze.

Hack Your Mac 2000

How to do the things you shouldn't— again!

by Ian Sammis & David Reynolds

FIND BBEdit Lite 4.6 on The Disc.

ong before a bunch of nefarious characters who wanted to do little except bring down Web servers co-opted the word *hacker*, it had a noble meaning— it referred to someone who used advanced (read: skanky) techniques to customize his or her operating system, bringing out its hidden abilities and making it more than it was. In the spirit of the original meaning of the word, we present the third installment of "Hack Your Mac." Here we'll show you five killer hacks (and we reprise five classics) to make your Mac look better, function more productively, and do more than you ever thought it could.

First, though, a note about the tools we use. One aspect of this how-to that's new to our series is the addition of hacks using the text editor, BBEdit. While creating and opening data files using BBEdit isn't quite a hack in the traditional sense, it's close enough to include it here. The reason we're drawing a distinction between BBEdit hacks and more traditional hacks using ResEdit (an Apple resource editing tool) is the nature of Mac files and applications. The Mac OS divides files into two parts or forks: a data fork and a resource fork. Most documents (word processing files, for example) have a data fork, which stores user information (such as typed text). Most applications (like Netscape Navigator) primarily rely on resource forks, which store pictures, icons, menus, or any other item the program needs. Some files, such as Nisus Writer's, have both a data fork and a resource fork. To edit resource forks (this is where you have most of the fun), you use ResEdit; to edit data, you use BBEdit.

WHERE TO GET THE TOOLS

You can download ResEdit 2.1.3 at http://asu.info.apple.com/swupdates.nsf/artnum/n10964. The file weighs in at 465K for the MacBinary version and 632K for the BinHex version. You can also find Apple's PDF book on ResEdit at http://developer.apple.com/techpubs/mac/resedit/resedit-2.html. Download BBEdit Lite from The Disc.

Hack 1: Change Your Stickies' Color

The Benefit: Add a bit of flair to your Stickies (possibly at the cost of a bit of eyestrain).

The Process: Stickies, the program that's lived comfortably at the bottom of most folks' Apple menus since 1994, almost begs for tinkering. Stickies sports one of the very few Color menus in existence that don't let you modify any of the listed colors. For a ResEdit jockey, that's a totally unacceptable situation. Why should we feel bound by the boring strictures of Post-it notes or the limits of artistic merit?

Just because our preferred color scheme might cause projectile vomiting, should we be prevented from using it?

The answer, of course, is no. Wielding ResEdit like the meat-ax it is, we can change the color scheme to suit our personal lack of color perception and taste.

Step 1
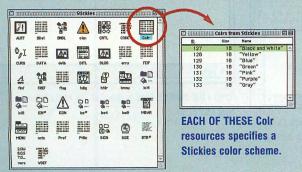
First make a duplicate of Stickies before you start hacking it. Stickies lives in the Apple Menu Items folder inside the System Folder. Select Stickies, then choose Duplicate from the File menu.

IT'S ALWAYS A GOOD IDEA to duplicate the program you're planning to hack in case you make a mistake.

Step 2
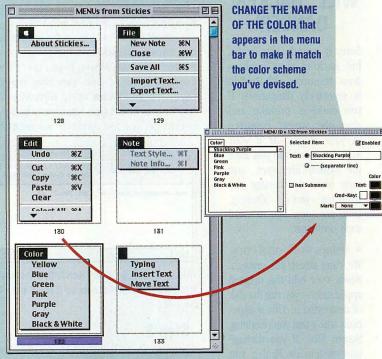
Run ResEdit, then open Stickies. Look for a resource with the name Colr and double-click it. (Hint: The resources are in alphabetical order.) The Colr resources represent the color schemes for the Stickies. Double-click one of these (we'll use Yellow for our example).

EACH OF THESE Colr resources specifies a Stickies color scheme.

THESE RESOURCES SPECIFY the Stickies app's appearance. The one you're looking for is Colr.

Step 3

Unfortunately, Colr isn't one of the resource types ResEdit understands, so it just dumps the contents as raw data. But with a little help from the HTML picker, which presents a color palette, you can crack the code. Access the HTML picker, part of Apple's color picker, from the Appearance control panel. The numbers represent, in order, the colors for the body, borders, and controls of Stickies. The only real difference between this code and the code for HTML colors is that you double each value—so if you want HTML color 9933FF (a hideous variety of purple), you'd enter 9999 3333 FFFF with added spaces.

WITH THE HTML picker, you can work out what code corresponds to what color.

Step 4

Once you've changed the color schemes, you'll want to change the names in the menu to match the new colors. From the original ResEdit window, double-click the Menu resource. Double-click the Colors menu and edit the text of the appropriate item. Quit ResEdit and save your changes—you have a new color scheme!

CHANGE THE NAME OF THE COLOR that appears in the menu bar to make it match the color scheme you've devised.

THE FIRST THREE GROUPS of letters and numbers specify the background color of the sticky, the next three the border, the final three the controls.

Hack 2: Modify Your Hosts File

The Benefit: Protect yourself from DNS failures and create shortcuts to commonly used servers.

The Process: This isn't a hack, exactly—it's simply a way to take advantage of a little-used feature of Open Transport. When you try to connect to an Internet site (say, for example, http://www.macaddict.com), the system must first use a service called DNS (Domain Name Service) to translate the name to an IP number (in the case of the *MacAddict* Web site, that's 206.246.21.40). Before Open Transport checks with your DNS server, though, it examines a Hosts file, which you can fill with connections and shortcuts you *always* want to have access to.

Why is that useful? Suppose you love our Web site (who doesn't?). And suppose your DNS server goes down a lot, and you want to access the site even when DNS isn't working. This hack lets you bypass the step where your system contacts the DNS.

DANGER, WILL HACKER! DANGER!

Sure, it sounds glamorous, but hacking your applications' resources with ResEdit is potentially dangerous. If you make a mistake and alter the wrong resource in your Finder, or if your Mac crashes while you have the System file open, you may seriously damage the software you're altering. Here are some tips to avoid such problems:

• **Always work on a copy.** We can't stress this enough. Never, ever edit the original application—you run the risk of destroying it. This is especially true when you're editing System files. If you damage your System or Finder, you may experience all kinds of interesting crashes or your Mac may not start up at all—so keep a startup disk handy. On the plus side, ResEdit can't hurt hardware—only software. Also don't try to hack an application while it's running.

• **Keep the original.** This is the corollary to the last tip. If a resource hack doesn't work as advertised, you'll need the original to replace the damaged copy you've been hacking.
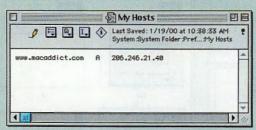
Step 1

First tell Open Transport where http://www.macaddict.com lives. Create a new file in BBEdit and type the following line, with tabs separating the three entries:

```
www.macaddict.com    A   206.246.21.40
```

This tells Open Transport how to find http://www.macaddict.com so it won't have to go through the initial step of looking up the appropriate IP number. Save the Hosts file in Preferences in the System Folder; call it My Hosts. If you don't know a given site's IP address, you can ping the site's name using the shareware utility IPNetMonitor (say, for Apple, you would type http://www.apple.com). That should get you the correct IP address.

THIS LINE TELLS OPEN TRANSPORT just where to find http://www.macaddict.com so it won't have to look up the URL.

Step 2

Now tell Open Transport to use this Hosts file when it looks for URLs. Open the TCP/IP control panel and pick User Mode from the Edit menu. Set the User Mode to Advanced. When you click OK, you'll see a number of additional options in the control panel. Click the Select Hosts File button and pick the file you just created. That's it! You should now be able to connect to our Web site even if your DNS goes down completely. As a bonus, you don't have to wait that tedious fraction of a second it takes to look up the name.

Step 3

Suppose you want to create a shortcut to our site and call it Max. Add the following at the top of Hosts:
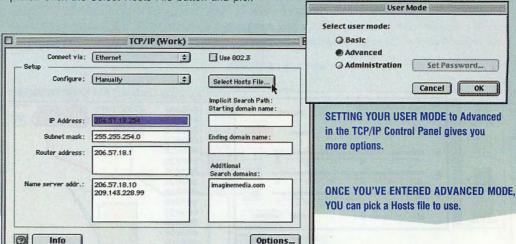
```
Max CNAME www.macaddict.com
```

This tells Open Transport Max is a *canonical name* (a shortcut) for http://www.macaddict.com. Save the Hosts file. Typing http://Max in a browser should take you directly to our site.

THIS LINE MAKES Max a shortcut for http://www.macaddict.com.

SETTING YOUR USER MODE to Advanced in the TCP/IP Control Panel gives you more options.

ONCE YOU'VE ENTERED ADVANCED MODE, YOU can pick a Hosts file to use.

Hack 3: Disabling the Help Key

The Benefit: Never again will you have to wait for the Help application to launch when what you meant to do was press the Delete key.

The Process: Rather than physically ripping the Help key from your keyboard, you can use some ResEdit finesse to disable the little goober.

hack

Step 1

Open the System Folder and duplicate your System file. Drag the System copy onto ResEdit, and when this window of resources opens, locate and open the KCHR resource. (They're in alphabetical order.) You'll see a list of all of the keyboard layouts installed in your system. Select the one titled U.S. (it should be ID 0) and press Command-D. This duplicates the U.S. keyboard layout. If you're using another layout, such as French or Dvorak, just select and duplicate that one.

NESTED AMID the clutter of the System resources, the KCHR resource controls the mapping of keys to characters. Modify this to make a key perform another job—in this case, we're going to make the Help key do nothing at all.

Step 2

Next, rename this resource with a more descriptive moniker: U.S. Help->null. Select the new U.S. keyboard layout you created (it should be ID 128), then select Get Resource Info from the Resource menu. In the box that pops up, type U.S. Help->null in the Name text box. Don't change anything else. Close the window, and you'll see that you've renamed your new resource.
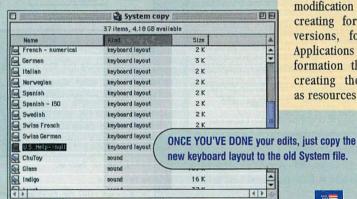
80	1834	"Canadian – CSA"
87	1498	"Spanish – ISO"
128	1422	"U.S. Help->null"
1111	1822	"French – numerical"
16300	1422	"Dvorak"
16301	1678	"Dvorak – Qwerty ▯"

AND THERE IT IS—a brand-spankin'-new keyboard layout. Next comes the hack.

Step 3

Double-click the new keyboard layout and you'll get a window that looks like Key Caps on steroids. Press the Help key, and three squares in the window go black. This tells you what you've got the key mapped to. Remember which far right square turns black, and drag the upper left square (the one with nothing in it) onto it. This replaces the signal to launch the Help application with no action.

Step 4

Quit ResEdit, saving the changes to the copy of the System file. Open the duplicate System, and drag the new U.S. Help->null resource to your current System file. The new keyboard appears in your Keyboard menu. To activate your Help-free keyboard, just select it from the Keyboard menu and say good-bye to Help. If you decide you just can't live without it, select your old U.S. keyboard from the Keyboard menu. Finally, make sure to throw the duplicate System file away—you don't want to confuse your Mac.

Here's a tip: If you can't see the Help key, you may have a nonextended keyboard layout selected. To fix that, choose View As from the KCHR menu (which shows up when you open the KCHR resource), then select one of the extended keyboards from the list. This won't affect the hack—it just ensures that the keyboard appearing in the window is the extended version (you know, the one with the troublesome Help key placement).

ONCE YOU'VE DONE your edits, just copy the new keyboard layout to the old System file.
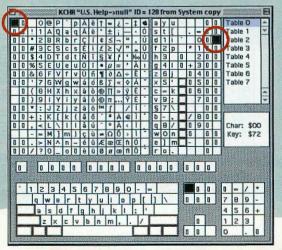
TO GET RID OF THAT annoying Help key, just select your modified keyboard layout from the Keyboard menu.

BY DRAGGING THE NULL character from the upper left corner onto the Help key's spot in the upper right corner, we effectively disable it.

Hack 4: Recovering Corrupt File Data

The Benefit: Get back that all-important info from corrupted files.

The Process: It's enough to strike fear into even the most stalwart among us—a message from the Finder saying that it cannot open a file because that file is corrupt. Erk! There is hope, however. ResEdit and BBEdit will open any file known to the Mac—even corrupt ones. You can often recover data you

thought was long gone. One warning: Corrupt files *can* bring down your Mac no matter what you use to open them. It's best to open the file, recover whatever data you can, and throw the corrupted file away. Then run Disk First Aid for an extra measure of protection. Of course, if you had backed up the file in the *first* place...

This hack works best on text-based files, such as word-processing docu-

ments. It doesn't work as well on items with funky formatting or other functions, such as databases (although you still should be able to retrieve the records), and it won't work well at all on an item that calculates values, such as a spreadsheet. If BBEdit doesn't show you the data you need, you can always try ResEdit, but odds are you won't find any useful information there. ResEdit *opens* mainly resource forks, not data forks.

Step 1

Pull the corrupt file out into a separate folder in a conspicuous place so you won't forget to throw it out after you're done. Then drag the file onto BBEdit, which will open the file no matter what it is.

OPENED IN BBEDIT, a FileMaker database comes across with records embedded in a ton of jargon. It will take some work to fix it.

A MICROSOFT WORD document, on the other hand, comes across relatively cleanly—but don't count on recovering any embedded images. They'll come across as gibberish.

Step 2

Once you have the file open, it's time to dig in and start cleaning up. Read the document and get rid of any obvious gibberish at the top and bottom. Once that's done, start looking at the text. You'll notice some gibberish inserted into
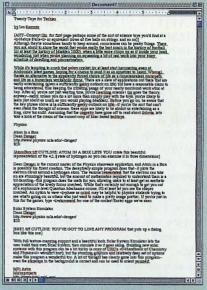
> Twenty Toys for Techies
>
> by Ian Sammis
>
> [ARTñConcept Illo. for first pageñperhaps some o
> Although theyíre sometimes handy to keep around,
>
> While itís tempting to crush that peksy cricket
>
> Physics
>
> Atom in a Box

SELECT THE ODD CHARACTERS that appear in the text and copy and paste them into the Search For box so you don't have to cross-examine Key Caps to emulate the symbol.

words, so rather than try to edit it all by hand, use BBEdit's search-and-replace function to do the job. Select the character in question—for example, in one case an accented ó has replaced a dash. Copy and paste it into the Search For text box. In the Replace With text box, enter what the character should be—in this case a dash or double hyphen. Then click Replace All to get rid of that particular piece of nonsense.

ALTHOUGH BBED-IT'S FIND function is insanely powerful, you only need to harness a small percentage of that power to uncorrupt your data.

Step 3

Once you have the corrected text, copy and paste it into a new document. Save that document and get rid of the corrupted original. If you're trying to recover a database, you'll have to place tab stops between the relevant sections and import the file as tab-delimited text.

AND THERE'S the final document, all reconstructed—better than Humpty Dumpty.

Hack 5: Custom Key Combinations
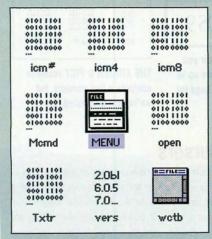
The Benefit: Makes applications' key combinations more useful.

The Process: Most menu commands have key combinations stored as resources in the application itself. By tweaking this resource, you can add custom key combinations connected to menu items for almost any application. However, a few applications—such as Microsoft Word and Excel—use custom menu resources you can't modify, so the hack we're demonstrating here won't work on them—you'll have to live with what you've got.

Step 1

Make a copy of the application you want to modify. We're going to be working on Audion, but you can apply these instructions to almost any application. Once you've copied the application, drag the duplicate onto ResEdit to start your hack. When ResEdit presents you with the application's resources, double-click the Menu resource to open it.

SELECT THE MENU resource to start the fun.

MENU "Playlist Menu" ID = 133 from Audion copy

THIS ISN'T EXACTLY WHAT Audion's Playlist menu normally says, and we added the Command-key equivalents as well.

Step 2

All of your application's menus are here, ready to play. Double-click to open the resource of the menu to which you want to add Command keys. We're working on Audion's Playlist menu. Once you've opened this, select the target menu item. Type the key you're attaching to the menu item in the Cmd-Key text box. It's very important that you don't assign the same Command-key equivalents to more than one menu. Make sure no other menu is using the ones you select—if you see it elsewhere, you'll have to choose another equivalent or alter the other menu. You can also alter the name of your menu here, if you like. We changed ours for fun.

THAT'S RIGHT— Command keys and new menu items to boot!

Step 3

Quit ResEdit, saving your changes. Then find your duplicate copy of Audion (or whatever app you were editing) and fire it up. The menus should reflect your changes. And unless it's a space-hogging 300MB monolithic app, you'll probably want to hold on to both the original application and its duplicate.

Five Classic Hacks
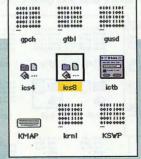
We tried to avoid writing about past hacks in this year's "Hack Your Mac" article, but we realized that some are just so good they deserve another mention. So we went back through past issues and came up with these classic hacks.

All of these maneuvers use ResEdit to alter the System or the Finder—and at the risk of sounding like your mother, always make a copy of these files before you start editing.

Alter the Apple on the Apple Menu
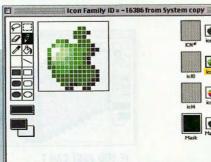
Last time you saw this hack—way back in January 1997—we put sunglasses on the Apple Menu apple. Maybe this is the year to get a little crazy and try something different. Just don't let Apple's legal department know about it: They don't have much of a sense of humor about these things.

Doing the hack:

Open a copy of your System file, then open the ics8 resource. Double-click the icon identified as -16386, and the 3D apple will pop open in its own little editing window. Here you can paint an entirely new icon to suit your needs. Once you're done, close the windows and quit ResEdit, saving your changes. Replace the original System file with the edited copy, then restart your Mac. Your new icon should appear right there in the menu bar.

JUST LOOK for the ics8 resource in the System file and open it to start editing.

Icon Family ID = -16386 from System copy
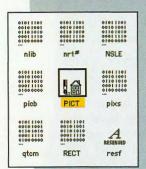
BY TWEAKING THIS ICON in the System file, you can make your Apple icon look like anything you want.

Create a New Startup Screen

Another classic—first revealed in our July 1998 issue, this hack involves replacing the PICT file that the System uses on the startup screen. And yes, we know it's easier to simply drop a PICT titled StartupScreen in the System Folder. The question is, will you have as much fun?

Doing the hack:

First make a copy of your System file and open it in ResEdit. Double-click the PICT resource and then open resource -16506 (the 256-color PICT that appears when you start up your Mac). Replace this with the picture of your choice, but remember that it should be the same size as the original, or you'll get some odd stretching. Close all of the windows, save your changes, and replace the original System file with the copy you edited. Restart your Mac and enjoy your new startup screen.

THE PICT RESOURCE in the System file contains the startup screen pictures you want to edit.

THIS IS THE STARTUP screen from Mac OS 9, but you can easily make it something more aesthetically pleasing.

Changing About This Computer

We're going to throw you a curve here and have you work with the Finder instead of the System. In order to change the About This Computer dialog box to something better-looking (it seems Apple has long neglected the beautification of this little bit of the System), you'll have to alter the Finder.

Doing the hack:

Make a copy of the Finder and open it in ResEdit. (This should sound familiar by now.) Locate the PICT resource and double-click it to open an editing window. It'll pop open with the picture that appears in the About This Computer box. Paste in a new picture (one that best expresses your feelings about your particular Mac), then close the windows. Save all your changes, replace the original Finder with the altered copy, and restart your Mac. Now you should have a nice, spiffy new graphic in your About This Computer box.

HOW UNIMAGINATIVE can you get? This picture that shows up in About This Computer just begs for transformation.
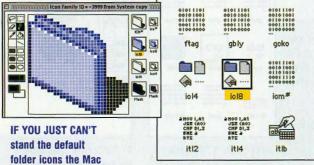
THE FINDER'S PICT resource contains a few wonders, but we're only interested in one.

Change your Folder Icons

Sometimes the default graphics that come with the Mac OS just aren't enough. Oh, they *look* nice and all that, but at some point you just want something more, something different. If you like the idea of a change but cringe at the thought of running potentially crash-inducing, interface-altering Extensions, you're a candidate for editing the default icons. With one swift motion, you can change the look of every single generic icon on your System.

Doing the hack:
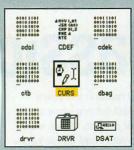
First make a copy of your System file and open that copy in ResEdit. Double-click to open the icl8 resource (this holds the system's eight-bit icons). There you'll see many of the System's icons in all their glory. You *can* edit any of these, but the one we're looking at is the ubiquitous folder. Double-click -3999 (which should look like a folder), and the Folder icon opens up in an editing window, where you can alter its appearance any way you like. Here's your chance to make us proud, Picasso—just remember to save your changes. Quit ResEdit and then replace the original System file with your hacked version. Restart your Mac to see glorious new icons replace all of your generic ones.

IF YOU JUST CAN'T stand the default folder icons the Mac OS provides, you can change them in this handy-dandy editor.

IF YOU'RE LOOKING for where the System stores its icons, then look no further—you've uncovered it.

Make New Cursors

The spinning wristwatch is a much-beloved part of the Mac OS—that is, until you have to wait *forever* for your Mac to finish doing something. Then it's as unwelcome as the hourglass. It turns out that the wristwatch (and a slew of other cursors) are stored as resources in the System folder—and thus are fair game for your hacking prowess.

CURSORS LIVE IN THE CURS resource—intuitive, eh?

THE WRISTWATCH IS a series of small pictures in the System file. You'll need to change them all to make a convincing new cursor.

Doing the hack:

Make a copy of the System file and open it in ResEdit. Find and open the CURS resource, which is where the cursors live. You'll see a series of familiar icons, including the wristwatch, the beach ball, and the hand. Decide which animated cursor you want to alter, but know that you'll need to change each frame of the animation—altering the number of frames is a discussion for another day, so for now it's best to make sure your new idea fits in the same number of frames as the old one. Open each frame and draw a new cursor. When you've edited all of the frames, close the file and save your changes. Replace your original System file with the altered one and restart your Mac. Presto! New animated cursors.

Ian Sammis and David Reynolds both had to perform clean installs of Mac OS 9 after writing this feature. Good luck.

Programming Doesn't Have To Be This Difficult. It's REALbasic!

REALbasic is the award-winning, visual, object-oriented BASIC development environment for the Macintosh.

Our application is easy enough for beginners and powerful enough for professionals to use. Whether you want to learn *(or return!)* to programming, REALbasic is for you!

Simply drag and drop user interface elements into your application's windows and dialog boxes to create anything from a small utility to a large application or the next great game—faster and easier than ever before. Experiment, explore, learn, and innovate as you build your applications step by step while REALbasic handles all the details for you so you can concentrate on what makes your software great—your ideas!

With the Professional Edition you can even access most databases and create applications that run on Windows.

While REALbasic is easy to use, it's also extremely powerful. Features like multi-threading, classes, inheritance, a powerful debugger, extensibility, VisualBasic project import, advanced dynamic recompiling compiler, TCP/IP controls, and multimedia tools make REALbasic the perfect combination of simplicity and sophistication.

Go to www.realbasic.com NOW to download a FREE trial version or call 512.263.1233.

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Apple Design Award
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Macworld.

MacHome

We take you behind the scenes of the making of an iMovie and help you create your own home, staff, family or vacation masterpiece!

THE MAKING OF A MACADDICT iMOVIE

UNCOVER THE MYSTERY
OF THE MAKING OF OUR FIRST iMOVIE FEATURE,

NOT ONE PEEP

STORY AND FILM CREATED BY
Narasu "Quiet on the set!" Rebbapragada

ome movies. Everyone loves to make 'em, but no one outside your immediate family ever wants to watch 'em. That's why you need a way to compete, to make your movie punker than the mundane mass of summer vacation epics. Take heart. With a DV camera, an iMac DV, Apple iMovie (free with your iMac DV), and a little filmmaking finesse, your movie can be head and shoulders above your neighbor's story of her niece's first tooth. Don't believe us? We put iMovie to the ultimate home-movie test—a home so dysfunctionally dynamic that it screams for attention each and every month, a movie so wacky that we've caught Jim Carrey taking notes (okay, that's a lie). That's right. We used iMovie to help create the *MacAddict* staff video this month. Why? Well, we couldn't film your home (that would be stalking), so we filmed ours.

In the next few pages we focus on iMovie, but many of the same basic concepts apply if you're using other editing software, like Apple's Final Cut Pro or Adobe Premiere. We realize our iMovie may not win a mention at Sundance or an invitation to join Apple Masters, but we like it—and that's all that matters.

WHAT YOU'LL NEED

- An iMac DV with iMovie (at least $1,299)
- A DV camera (see "Buying a DV Camera," p37)
- iMovie software update from http://asu.info.apple.com

WHAT YOU'LL WANT

- Adobe Photoshop ($599) for stills
- Apple QuickTime Pro ($30) for special effects
- Casady & Greene SoundJam ($39.95) for converting digital music formats

Scene 1: Shooting Footage

O bviously, the first step in filming any home movie is to shoot your video. But you can take steps during the shooting phase—and even before—that enhance your movie. We won't bog you down with too many rules and regs—after all, this is supposed to be fun, right? However, we do want to pass along a few tips that we picked up along the way. And remember: Unlike those hokey home movies of yester-year, with iMovie you don't have to film your masterpiece in viewing order, since the software is based on a nonlinear editing (NLE) system. That means it stores video and audio on computer disk, so you can film footage in any order, then reorder and change it during the editing process.

The Ends Justify the Means

Before you even start shooting, think about how you want to present your movie. If you're going to view your flick only on a TV monitor or via a high-quality CD-ROM, by all means push the creative limits of visual chaos. However, if you have an inkling that you'll distribute your video on the Web, you'll want to take lots of close-ups and minimize detail to compensate for the fact that viewers will see your video at a small size. And if you're looking to email this sucker, plan on making it no longer than 30 seconds.

Do a Storyboard

A true storyboard (a literal sketch of each and every scene in the entire movie) is probably a little anal-retentive if you're just putting together a home movie. Still, a couple of notes scribbled on index cards can really help you plan. For example, we figured out in advance all the scenes involving Reviews Editor Narasu's transformation into Features Editor Nikki by sketching out the props we needed and how we'd shoot them. Planning ahead saved time by allowing us to film this group of scenes all at once.

EVEN THIS SHORT SCENE required planning to find a camera angle that would include all the movement.

IT DOESN'T HAVE to be pretty.

Keep Your Set Well Lit

Your viewers won't notice if your set is well lit, but they'll find it distracting if it isn't. In general, video has a smaller latitude for light and shadow than 35mm film, so your light source must compensate. Also, most codecs (tools for reducing file size), as well as QuickTime movies, thrive on adequate lighting.

A DIMLY LIT MOMENT obscures the action in this shot.

Minimize Handhelds

You've heard it before and we'll say it again: Use a tripod—a sturdy one. *Blair Witch Project* aside, shaky movies that cause nausea don't sit well with the audience (literally). If you want to pan and zoom, move the camera slowly. Jerky camera movement is also hard to compress.

AN OVERCAFFEINATED CAMERAPERSON had trouble excluding Nikki's elbow during this handheld shot.

Minimize Detail

Keep in mind that most viewers will see your film on a computer monitor, which reduces background detail to nothing more than visual distraction. Elements such as tree branches blowing in the breeze and movement outside windows are difficult to compress and often go out of focus.

THE CLUTTER IN OUR OFFICE detracts from the action in the foreground.

Use a Microphone

You don't want that actor across the room to *sound* like he's across the room. Ideally, you want to position a microphone near the actors. If you are restricted to the mike on your camera, though, have your subjects speak loudly lest they become lost in the background noise. Tempting as these are, avoid using voice-overs during dialogue—iMovie isn't equipped to line up audio with video precisely, and you'll end up with bad lip-syncing, Milli Vanilli style.

Action!

There's nothing like a good action sequence to wake up your viewers. The trick is to remember that you're filming a three-dimensional event for viewing on a two-dimensional screen. To add depth to your scene, film it from different angles and perspectives, then edit the clips together in iMovie.

Our action sequence involved Narasu pulverizing Nikki with a few good karate moves. We had the luxury (not to mention the pleasure) of reshooting the scene from several different angles. Your intramural Frisbee team, however, might not take to the idea of three repeats during the game just to please the filmmaker in you. No matter—just make sure there's continuity of movement. The subject's arm doesn't have to appear in exactly the same position before and after the cut, but it should be going in the same direction and at the same angle.

HERE IT IS again...   **...and again.**

HERE'S THE SAME movement filmed from two different angles.

Scene 2: Capturing Footage

Once you've shot your footage, the next step is to import it to your iMac. Unfortunately, since iMovie targets beginners, you can't reduce the image size of the video you import below your camera's default (in our case, the standard full-screen resolution is 720 by 480 pixels). While this creates a larger file size on your desktop, you can reduce the image size when the time comes to export your video. Also, iMovie allows you to view lower-quality video to speed along the editing process—without affecting the actual quality of the finished product.

1 Plug your camera into your iMac's FireWire port, put your camera in playback or VTR mode, and you can use the rewind, play, and fast forward buttons on your camera—or the ones in iMovie's interface—to view what you've filmed.

2 Click the Import button to capture footage, click stop when you're done, and you've created a clip. If you filmed scenes, with a few seconds of dead space between each, iMovie can separate your clips with scene breaks. The length of individual clips is up to you, but iMovie does not support clips larger than 2GB (approximately 9 minutes).

3 In iMovie's preferences, you can choose whether to import clips into the movie timeline (Movie) or into the clip well (Shelf). The latter option makes organizing clips much easier. Bring them directly into the timeline only if the clip well is full, or you won't be editing that clip much. Your monitor's resolution determines the number of clip wells you have. At 800 by 600, you get 9 wells; at 1024 by 768 pixels, you get 12 wells. If you fill the shelf with clips, just move them into your timeline to make room for more.

Playback / Import

☑ Automatically start new clip at scene break

Imported Clips Go To:
○ Shelf
● Movie

Cancel   OK

Scene 3: Editing Footage

After you import your video, you will want to piece it together into a cohesive film. Video editing in iMovie is as simple as cropping, splitting, and rearranging your clips in the movie timeline. When you've tweaked the video to your satisfaction, you may want to add titles, transitions, and music, all of which come together to create the right mood.

Karate Crop

Cinema vérité be damned—we suggest that you crop the excess crap out of your clips. Dull or excess footage takes up disc space and bores your audience. Luckily, iMovie makes cropping easy.

CHOOSE A CLIP AND DRAG the playhead to the beginning of the footage you want to cut. Clicking below the monitor bar reveals two triangular crop markers. Drag these until they span the footage you want to cut.

CHOOSE CROP from the Edit menu. If a clip is too large to manage, split it.

Transitions

Transitions are a great way to add flair to your story, and the iMovie software makes it easy to drag and drop them between clips. We found another *nontraditional* use for them: covering up bad scene cuts.

Just click the Transition button in the Effects palette, and the Transitions window pops up. Choose one of iMovie's many transitions, from the classic Cross Dissolve and Fade In to the wacky Looney Toons-esque Warp In. Preview your choice in the window, move the slider to set the speed, and when you're satisfied, drag the transition between two adjacent clips in the timeline. In the intro of our project, we originally used a slow cross-dissolve to indicate the passage of time—we later took it out and opted for a cleaner lead-in to the movie. Transitions tend to add a lot to your file size—so use them sparingly and subtly. Tons of *Batman*-style spiraling is garish.

WE OPTED not to include this Warp In transition.

Titles

While you can't add anything as grand as a *Star Wars* text intro, iMovie lets you add simple titles and film credits to your flick. The method resembles how you would make a transition: Click the Titles button in the Effects palette and choose a style from the menu. iMovie lets you choose the font and color of the titles and offers a small text box where you can type them. We used titles sparingly for the opening and closing credits. We couldn't resist some of the cheesier fonts in our collection, but at small sizes a clean sans serif will do the trick.

JUST TYPE IN TEXT, stylize it, and you've got a title.

Inserting Stills

One or a series of solid still shots can have just as powerful an impact as a good action sequence. We used one still to end our movie. iMovie lets you import a series of stills—PICT, GIF, JPEG, BMP, or Photoshop files—and set the frame rate in the timeline. This gives you the ability to set up different effects—for instance, a slower frame rate can create the feeling of a nice, intimate photo essay.

A SERIES OF STILLS is a great way to show off your pix. We used one still as a backdrop to our closing credits to save space.

Adding Sound
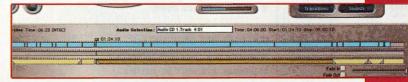
Sound can make or break a film, and iMovie provides some options to bring a soundscape to your video. Say you want to accompany a dramatic moment with sound. You can insert CD tracks via the Music button on the Effects palette; import AIFF files and QuickTime-supported MP3 files; do a voice-over to narrate your tale; or choose from iMovie's campy sound effects (we resisted the urge to add a horse's whinny to Nikki's last breath). Also, you can find free looping music at http://www.apple.com/imovie/freestuff (where you'll also find cool backgrounds and stills).

Though Apple revamped iMovie 1.01 to support the ever-popular MP3 music format, the program can only import QuickTime-

IMPORT CD tracks here.

PLACING AUDIO EXACTLY WHERE YOU WANT IT using iMovie's sliders and bars poses quite a challenge.

ready MP3 files and didn't recognize ours. So we converted our tracks to AIFF format in SoundJam, and they worked just fine. For audio newbies, SoundJam is an MP3 player and encoder with a ten-band graphic equalizer that lets you make very simple tonal and quality adjustments to tracks. In fact, if you want to tweak any audio, you should do it here. You can move your clips around and adjust volume and fades with iMovie, but that's about it.

Scene 4: Compressing Your Movie

Having shot, captured and crafted our project, we found that our 6 1/2-minute video had grown to a happy, healthy 2.1GB bouncing baby iMovie during the editing phase. To bring it to you, we had to squeeze it down to a size that would fit on The Disc. That meant exporting it to QuickTime format using a compression codec (compressor/decompressor), an algorithm that reduces file size by removing less important or duplicate information. Some codecs compress spatially. This means in an area of flat color (like a sky or sea), rather than recording all of the individual identical pixels, the codec treats the area as one unit. Other codecs compress temporally by examining a series of frames, recognizing the differences between them, and recording only that information.

Compression Made Easy

If you snored through the last paragraph and really don't give a fig about the wily ways of video compression, no worries: iMovie makes it easy. Choose Export from the file menu, and decide whether you want to create an email movie, a small- or medium-size Web movie, or a small- or medium-size CD-ROM movie. iMovie picks audio and video compression settings for you, and you don't have to give it another thought.

PICK ONE OPTION and let iMovie worry about the nitty-gritty of compression.

Export to: QuickTime
Formats: ✓ Email Movie, Small
Web Movie, Small
Web Movie, Small (QT3.0)
Video : Sorenson CD-ROM Movie, Medium
Audio : QDesign CD-ROM Movie, Large
Expert...

The Evil Expert

As your iMovie collection grows, you might find yourself tempted by that lone option sitting at the bottom of the Formats menu in the Export To QuickTime screen: the Expert setting. This option provides greater control over reducing file size while maintaining film quality. It will ask you to choose the values in five areas: codec, image size, frame rate, data rate, and audio compressor.

Codec The Expert option offers a daunting range of codecs, from industry standard to downright esoteric. However, 99 percent of you need only Sorenson, a temporal compressor, and Cinepak, a spatial compressor. The Sorenson video codec produces excellent Web and CD-ROM video that any Pentium or PowerMac can download and play, provided it has QuickTime 3.0 or later. Compared with Cinepak, Sorenson generally achieves higher image quality at a smaller file size. However, it requires greater processing power, so if you have a lot of friends with older computers that can't download QuickTime 3 and 4—as unlikely as that may be—you should probably compress in Cinepak.

Image Size The smaller the image size, the lower your file size. Full-quality video requires an image size of 640 by 480. (Note to pedants: We know that 720 by 480 is technically the standard for DV and that 640 by 480 is for North American TV. So there.) For our movie, we used a size of 320 by 240, good for high-quality CD-ROM video. If you're outputting to the Web, reduce that file size even more, to 160 by 120. A detailed background warrants a larger image size, so if you're shooting for the Web, minimize detail.
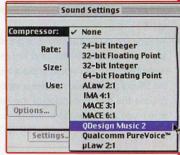
DON'T LET THIS DAUNTING list intimidate you. Stick with Sorenson or Cinepak, and you'll be just fine.

Compression Settings
Animation
BMP
✓ Cinepak
Component Video
DV – NTSC
DV – PAL
Graphics
H.261
H.263
Intel Indeo® Video R3.2
Intel Raw
Motion JPEG A
Motion JPEG B
None
Photo – JPEG
Planar RGB
PNG
Sorenson Video
TGA
TIFF
Video

Frame Rate A frame is a still image, and frame rate is the number of frames per second (fps) in your movie. North American video standards call for 30 fps (actually 29.97 fps, to be persnickety.) We used 15 fps for our flick. A Web movie can get by with 7.5 to 10 fps. An action video requires a higher frame rate than a still interview.

Data Rate The data rate is the information per second that creates your movie. Low bandwidth (for Web videos), limited space on a CD-ROM, and viewers with older machines are reasons to reduce your data rate—which reduces your film quality. We initially used a 140-KBps data rate, which resulted in grainy video in some scenes. Upping the data rate to 160 KBps improved video quality and increased file size by only 5.5MB.

Audio Audio compression works by evening out the highs and lows in your audio, and this process actually benefited our film by making some of the muffled audio louder. The QDesign Music 2 codec is recommended for low-bandwidth Web audio, but you'll need QuickTime 4 to hear it. We used the IMA 4:1 codec to accommodate viewers with older Macs. If your movie consists only of spoken dialogue, Qualcomm PureVoice will render a smaller file than the others.

Sound Settings
Compressor: ✓ None
Rate: 24-bit Integer
32-bit Floating Point
Size: 32-bit Integer
64-bit Floating Point
Use: ALaw 2:1
IMA 4:1
Options... MACE 3:1
MACE 6:1
Settings... QDesign Music 2
Qualcomm PureVoice™
µLaw 2:1

THERE ARE MANY AUDIO options, but QDesign, IMA 4:1, or Qualcomm should satisfy you.

Contest

Submit your own iMovie by visiting our Web site, http://www.macaddict.com. We'll be posting the best movies, giving away prizes, and maybe we'll even give you that break in the film industry you've been waiting for (all right, maybe we won't). See the Web site for details.

Space Hogs

DV film projects occupy monstrous amounts of space on your hard drive. You'll end up filming much more than you actually need, and what you *do* use isn't small. To give you an idea, this table describes our project's 2.1GB file size after two of the major codecs reduced it.

Codec	Purpose	File Size
Sorenson	For viewing on machines that can run QuickTime 3.0 and up	52.6MB
Cinepak	For viewing on older Macs and PCs	51MB

Great Resources
WE USED THEM; YOU SHOULD TOO

Terran Interactive, a division of Media 100, has great tips-and-info sections on QuickTime and codecs at http://www.terran.com/info/index.html and http://www.CodecCentral.com.

Apple's Technical Information Library posts troubleshooting and technical information in a searchable database at http://til.info.apple.com.

The New Venue has tips for making movies specifically for Web distribution at http://www.newvenue.com.

Apple offers resources and help for people creating QuickTime content and putting it on the Web at http://www.apple.com/quicktime/authoring.

Buying a DV Camera

You've already taken the plunge and purchased a DV iMac...what's another $1,000 out the window? There *are* DV cameras available for less, but like everything else in life, the more you spend, the more you get. When you're buying a DV camera, you should go armed with a couple of basic pieces of info.

Apple calls it FireWire. Sony calls it i.Link. The rest of the world calls it IEEE 1394. Either way, it's important that your DV camera has one of these ports so you can hook it up to your iMac. Also, most DV cameras for consumers (read: cheaper models) utilize the mini-DV tape.
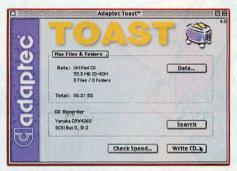
Also check out these sites for more information about specific models: Canon at http://www.canondv.com, JVC at http://www.jvc-america.com/digital_camcorders/digital_camcorders.html, and Sony at http://www.sel.sony.com/SEL/consumer/ss5/generic/digitalvideo/minidvcamcordersproducts/index.shtml.

Scene 5:
Presenting Your Movie

Now that you've shot, sequenced, and squished your video, you're ready to impress friends and family. Here are four ways to show off your iMovie. Your film will look best on a TV screen, but a QuickTime movie on the Web or on CD-ROM can make it easy to distribute en masse. Pick one or use them all. There's no such thing as *too many* copies.

From a CD-ROM

To burn a CD-ROM, you'll need CD recording software, like Toast 4 Deluxe, and a CD-R drive. Once you've made that investment, burning a CD version is a snap. Create a QuickTime movie out of your iMovie project using one of the CD Export options or equivalent Expert settings. Drag the MOV file from your hard drive into Toast's Mac Files And Folders window, then click Write CD. Choose a CD speed (4X is standard)—your movie will burn, baby, burn.

USE IMOVIE TO BURN your toast to CD. Oh wait, that's backwards.

On a TV

Without compressing your video, choose Export To Camera in iMovie's Export settings to get it back onto your DV tape. This preserves your video at full quality. Then plug the camera into your VCR and record your movie onto a VHS as it plays on your TV screen.

From an Email

iMovie's email format (available via the Export To QuickTime option) creates a small video file appropriate for emailing to friends. Unfortunately, you won't be able to compress the whole movie since you can't go emailing 50MB files, so you may have to settle for just a trailer. Shoot for a 30-second, 4MB file, and pray that the people receiving your email movie have high-bandwidth connections (or a *lot* of time on their hands).

Via the Web

Apple has engineered the simplest way to get your iMovie on the Web. Create an iTools account through Apple's Web site, and you'll receive free Web publishing capabilities. The catch is that you'll need Mac OS 9, and your movie must be 20MB or smaller to fit on your iDisk, Apple's Internet storage space for movies and images. Ours wasn't. If you have your own site, Web authoring software such as Dreamweaver (see *Reviews*, this issue, p48) has a menu option that allows you to embed QuickTime movies (or any media requiring a plug-in) into your Web page. For our movie, the HTML code would be:
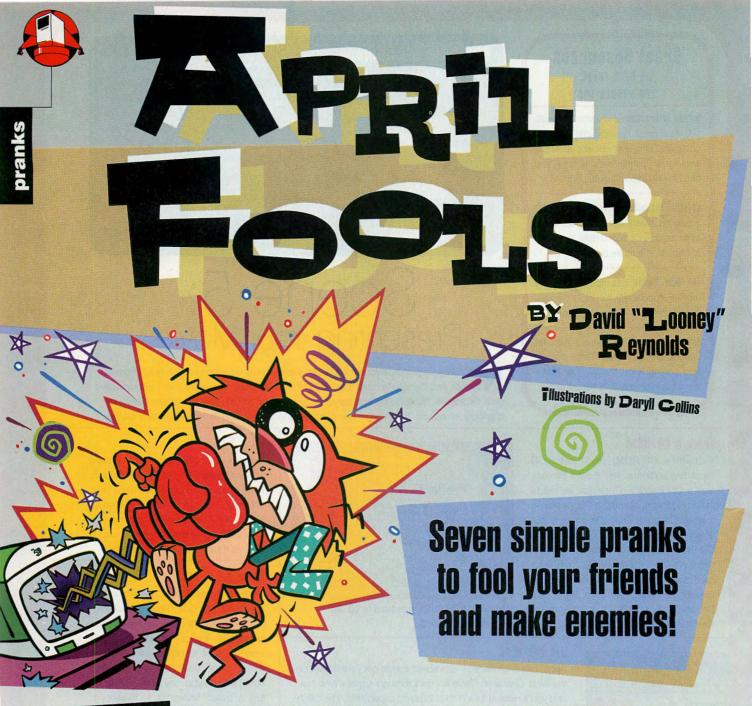
```
<embed src="NotOnePeepPt1.mov"
width="320" height="264" loop="false"
controller="true"
autoplay="false"></embed>.
```

This code embeds a nonautolooping four-by-three-proportioned movie with controller options into your Web site.

IT'S EASY TO EMBED a small QuickTime movie into your iTools home page.

```
<body bgcolor="#000000">
<embed src="NotOnePeepPt1.mov" width="320" height="264" loop="false" controller="true" autoplay = "false">
</embed>
</body>
</html>
```

A LITTLE HTML never hurt anyone. Here's the code for embedding our movie into Dreamweaver.

Narasu Rebbapragada has been sentenced to 100 hours of community service for the fake attack on Nikki Echler.

APRIL FOOLS'

BY David "Looney" Reynolds

Illustrations by Daryll Collins

Seven simple pranks to fool your friends and make enemies!

That's right, fellow pranksters, it's that time of year again. As poet T.S. Eliot said, "April is the cruelest month," and with our help, it will definitely be cruel for a few selected Mac users out there. We've put together our favorite Mac-related pranks for you to play on unsuspecting friends, coworkers, and family members.

That said, here's our huge, fat, cover-our-ass disclaimer: These are jokes. Play them for mutual enjoyment, in a fair and nonmalicious manner. Jokes intended to cause undue stress are not funny, nor are they jokes. Be sure that

your subjects will accept your pranks with a good sense of humor, and that they will not resort to something potentially harmful, such as erasing the hard drive (to try and fix the problem) or coming after you with a baseball bat. Always know how to undo your mischief safely. We are providing these tricks for their humor value only, and we expect you to know the difference between a joke and malicious, antisocial behavior.

Note: The preceding is best read aloud at a manic pace, in the manner of a radio ad announcer reading the disclaimer for a credit card plan or used car sale.

THE JOKE: UNRESPONSIVE WINDOWS AND ICONS

THE PUNCHLINE: Confusion ensues when windows and controls in your victim's desktop pattern don't work—because they're actually part of the background.

THE DELIVERY: This one's simple—take a screen shot of a person's desktop with several windows, and use it as a desktop picture. First open a few windows. Opening the hard drive window is key—make sure it's active when you take the shot. Hide the cursor by moving it as far as possible to the lower-right corner. Then use Command-Shift-3 to take a screen shot of the desktop.
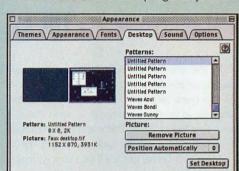
Find the picture on the hard drive and rename it Faux desktop or something equally telling (although this isn't necessary, it helps you find your joke pattern).

Drop it in the Appearance folder inside the System Folder. Open the Appearance control panel, click the Desktop tab, select the desktop image on the left, and then click the Place Picture button. Find and select your new screen shot in the dialog box that pops up, then click the Set Desktop button. Close the Appearance control panel, and you'll soon have your target desperately trying to close and drag windows that refuse to budge.

THE FIX: Remove the desktop picture by clicking Remove Picture in the Desktop tab of the Appearance control panel.

THE AMENDS: Offer to help organize your friend's desktop.
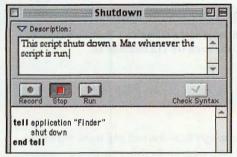
THIS ONE'S EASY—just take a screen shot and place it as a desktop pattern. In this instance, the Mac has two monitors. We've only changed the one on the right.

THE JOKE: INSTA-SHUTDOWN

THE PUNCHLINE: The Mac shuts down as soon as the desktop appears.

THE DELIVERY: This one is a classic. It's been around almost as long as the Startup Items folder. To make it work, you simply place a small AppleScript in the Startup Items folder, telling your victim's Mac to shut down. Devious, eh? We've added a few twists to it, too. Here's how it works. Fire up Script Editor and type the following script:
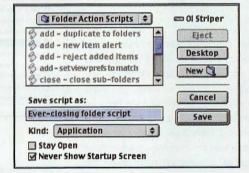
```
tell application "Finder"
      shut down
end tell
```


TO CREATE YOUR SHUTDOWN SCRIPT, just enter this text in the Script Editor and save it as an application.

Save the script by choosing Save As from the File menu. Make sure that you're saving it as an application and you've checked the Never Show

Startup Screen box—otherwise you'll spoil the whole joke. Then drop the script in the Startup Items folder and watch the fun begin!

MAKE SURE TO SELECT the Never Show Startup Screen box. Otherwise the whole joke will go kaflooey.

If you're looking for a truly advanced prank, change the name of your script to just a single space (that keeps the name from showing up when the script launches), then use ResEdit (or any other utility) to make your shutdown script invisible. Your hapless victim will have a heck of a time finding the source of the problem. Just don't let it go too far.

THE FIX: Remove the shutdown script from the Startup Items folder just as the script launches (and before the system shuts down again).

THE AMENDS: Offer to help clean out the victim's Preferences folder after you remove the shutdown script.

FOOD FOR THOUGHT

If these jokes don't quite work for you, here are a few more ideas that may tickle your fancy.

- **Disguise Applications:** By giving an AppleScript the same name and icon as an existing application (such as Microsoft Excel), you can make all kinds of hilarious things happen. When a user double-clicks the icon, instead of launching Excel (or whatever app you choose), the Mac launches AppleScript instead. Make AppleScript pop up a dialog box that says "Not Excel—that's so boring!" and quits.

- **Alter Keyboard Layouts:** By using ResEdit to change keyboard mapping (see "Hack Your Mac," this issue, p24), you can make someone's S key type E instead. It's joyous!

- **White on White:** Make a word processing document's text white, and all of the words seem to disappear from the file. Want to see a coworker gasp in horror? This'll do it.

THE JOKE: MISSING MOUSE BALL

THE PUNCHLINE: The mouse mysteriously stops working.

THE DELIVERY: This is as simple as it gets. Find an unsuspecting Mac user, and when he or she isn't looking, steal the mouse ball from the mouse by unlocking the retaining ring, removing the ball, and replacing the ring. For older ADB mice, it's a simple counterclockwise twist of the ring. For newer "puck" mice, it's the same basic operation, with one caveat: The top of the mouse is translucent, so figuring out that the ball is missing is considerably easier.

THE FIX: Return the mouse ball to its cozy home.

THE AMENDS: Offer to clean the mouse after you return the ball.

THE JOKE: THE EVER-CLOSING FOLDER

THE PUNCHLINE: The victim tries to open a folder, only to have it close, accompanied by an annoying message.

THE DELIVERY: This prank relies on the Folder Actions capability in Mac OS 8.5 and later—it won't work in earlier versions. Pulling it off is an easy process. First launch Script Editor and type the following (note that the speech portion of this trick—the fourth line of code—only works in Mac OS 9. Delete that line if the victim is running an earlier version of the Mac OS):

```
on opening folder this_folder
     tell application "Finder"
               activate
               say "Wouldn't you rather play a
               nice game of chess?"
               close container window of folder
               this_folder
        end tell
end opening folder
```

As you open the target folder, this script tells the Finder to use Speech to say the phrase, "Wouldn't you rather play a nice game of chess?" and close the folder. Of course, you can program it to say whatever you want. And if you delete that line of code because the victim is running OS 8.5 or 8.6, the folder will open and then close, without saying a thing. Either way it's annoying—perfect. Save the script as a compiled script using the Save As command. Move it to Folder Action Scripts in the Scripts folder, which lives in the System Folder. Then choose the target folder.

Control-click it to bring up the contextual menu, and choose Attach A Folder Action from the menu. Find the ever-closing folder script you just saved (in the Folder Action Scripts folder), then select it. Test it out by opening the folder—it should speak the message you programmed, then close.

Unfortunately, when you attach the script to the folder, a miniature script icon will appear on the folder, even if it has a custom icon—and there's no easy way to disable this. You just have to hope your target is too baffled to notice it.

THE FIX: Control-click the folder and select the script from the Remove A Folder Action submenu.

THE AMENDS: Help your friend write a *useful* Folder Action Script.

YOUR SCRIPT should look like this after you select Check Syntax (don't include line four unless the Mac has OS 9).

NEST YOUR FOLDER ACTION in the Folder Action Scripts folder— this isn't a must, but you won't lose it if you store it there.

SIMPLY CHOOSE Attach A Folder Action from the folder's contextual menu, then select your homebrewed script in the dialog box that pops up.

David Reynolds once sold a roommate's Mustang without his knowledge. It was worth the $15 classified ad.

ENJOYING THE JOKE

A good joke isn't complete unless you're there to enjoy it. Therefore, do your best to be present when the joke springs—for a couple of reasons. First, it's no fun to have your victim tell you how he or she experienced odd problems but managed to fix them. Second, it's *really* no fun to have your victim tell you how he or she erased the hard drive in an effort to solve the problems. For your pleasure (and the safety of others) always try to hover close at hand when you're playing a joke. Here are a few other tips.

- Try to keep a straight face—the best joke is one that lingers.
- Try to set it right covertly. By fixing the problem without letting the target person know you're doing so, you leave him or her baffled and ripe for another joke.
- Try for the trifecta. If you're looking for the perfect joke, attempt a run of three or more in a row without tipping off anyone that a joke is afoot.
- Make sure there are no hard feelings. Again, malicious jokes aren't funny. No one should get hurt.

FileMaker Pro: The Website Fixer-Upper

by Maria Langer

Luring people to your Web site on a daily basis can be tougher than catching the Loch Ness Monster with a few crusty worms and a fishing pole. People want fresh content every day, if not every minute, but posting daily updates can be time consuming and costly. On the other hand, bandwidth-challenged modem users and—well, anyone with good taste—may find tacky Java tricks like scrolling banners and rollover buttons more annoying than appealing.

So where is a frustrated Web designer to turn? Fire up File-Maker Pro and let your database do the talking. If your eyes just glazed over and your brain went to sleep at the mere mention of the word database, splash your-self with some cold water and give this article a chance. Databases don't have to be boring or complicated. If you know how to create a simple database in FileMaker Pro, you can use it to pep up your Web site with people-pleasing features like an interactive calendar of events, classified ads, an online message board, or a guest book—all in a few simple steps.

Don't believe us? We'll take that challenge. We've created a step-by-step tutorial on creating a database-equipped Web site. You'll need to provide your own FileMaker database, but once you have created it, we'll show you how it can power up your Web site. We're putting ourselves on the line, but we have a feeling you won't prove us wrong.
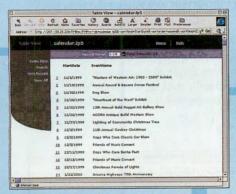
Use FileMaker to make sense of your Website!

Fielding **Choices**

filemaker

FileMaker Pro offers two ways to publish information on the Web: the easy way and the hard way. We'll start with the easy way—Instant Web Publishing. Instant Web Publishing enables you to publish database information on the Web almost instantly. (That's probably where the name came from.) You simply specify which FileMaker Pro layouts you want for each view of the data: table view (basically a list), form view (for details), or search view (for record searching). In FileMaker Pro version 5, you can also specify one of several Web styles that define the look of your Web pages.

What's great about Instant Web Publishing is that anyone can do it. It's very simple and it takes only minutes—the example below took less than five minutes to put online. But this simplicity imposes limitations—Instant Web Publishing limits both the features Web pages can include and your control over the way they appear on your site. This method of publishing may not be acceptable for all Web sites, especially if you have certain ideas about what should be on your site and how it should feel.

Now for the hard way: Custom Web Publishing enables you to create completely customized databases for Web sites. You start by building format files—special HTML documents that contain a combination of HTML and CDML (Claris Dynamic Markup Language) or XML (Extensible Markup Language). The CDML and/or XML commands enable a visitor's Web browser to communicate with your database file. But first you must place the format files in FileMaker Pro's Web folder and create a link to the site's default page. Then you spend the next few hours or days (or weeks) testing and debugging the files before you finally go live and let site visitors find the bugs you missed. Although you can do this with a dynamic IP, it doesn't make much sense, as you'll have to change the file in FileMaker Pro every time it changes.

Probably the best part of FileMaker Pro's Web publishing capability is that it does not require a Web server. The FileMaker Pro application can assume this function, intercepting requests that come to its IP address. All you need to take your database live is a static IP address.

INSTANT WEB PUBLISHING can display database information in a list, like this...

...or in a form, like this.

A CUSTOM CALENDAR LIST view may simply list events...
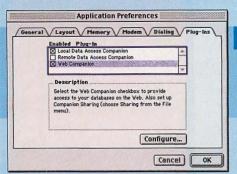
...but a custom detail view can provide all kinds of information about a specific event.

Design Goals

When designing an interactive feature, you must first decide how hands-on you want it to be. Take the calendar of events, which mainly exists to provide a list of upcoming events. Although you can make a calendar that simply displays the list, you can also include interactive features that make your calendar more interesting and functional. Here are a few ideas:

● Multiple views of the data can make it easier for visitors to find needed information. A quick list of upcoming events might show just the date and the event name, while a detailed view could include the start and end time, a complete event description, and contact information for learning more. You usually get to this extra information by clicking a link in the list.

● A search feature enables a visitor to track down events by date or time, type of event, location, or cost. If you want to add a search feature, allot each searchable item a separate field in the database.

● You can also let visitors add events to the calendar. This is a double-edged sword: Although visitors can provide valuable data to share with others, you may get a few lippy tourists who don't add the kind of data you want to display. Any time you enable visitors to add information to your database, you must have a way to check the information—preferably before it gets published on the site.

● An edit or delete feature allows visitors to change or remove existing info. Again, be careful with this one. You wouldn't want some bad egg deleting all the records in your database, would you?

● Links within the database make it possible for site visitors to access another Web site or page or send an email message with just one click. This is easy to set up if your database contains URLs or email addresses.

The Instant **Database-Driven** Web Site
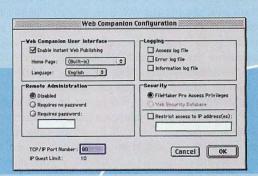
Here's a quick how-to using Instant Web Publishing with FileMaker Pro 5 to create a simple database-enabled Web site. (The instructions are very similar for versions 4.0 and 4.1, so if you have one of these versions, you should be able to follow along.) These instructions assume you have already created a FileMaker Pro database, as well as layouts for the fields you want to display in each Web view: table, form, and search.

1 Enable the Web Companion plug-in. To do this, go to the Edit menu and select Application from the Preferences submenu. You should see the program's Application Preferences dialog box. Click the Plug-Ins tab, select Web Companion, and check the box beside it. Next, click the Configure button to activate the Web Companion Configuration dialog box.

USE THE APPLICATION PREFERENCES dialog box to enable Web Companion.

2 Configure the Web Companion plug-in. Make sure to mark the Enable Instant Web Publishing check box and select Built-In from the Home Page pop-up menu. If the computer running FileMaker Pro is also running Web server software, enter 591 in the TCP/IP Port Number edit box. Otherwise, leave it at the default value of 80. Click OK to save your settings. Then click OK to dismiss the Application Preferences dialog box.

SET UP INSTANT WEB PUBLISHING in the Web Companion Configuration dialog box.
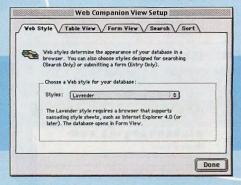
3 Turn on Web Companion Sharing. To do this, start by opening the database you want to publish on the Web. Then choose Sharing from the File menu to display the File Sharing For dialog box. Select Web Companion by marking the check box beside it. Then click the Set Up Views button to display the Web Style tab of the Web Companion View Setup dialog box.
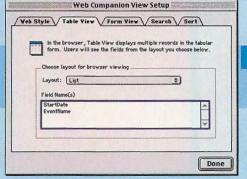
ENABLE WEB COMPANION SHARING by checking Web Companion in the File Sharing dialog box.

4 Set up views for displaying your data on the Web. (If you're using FileMaker Pro 4.x, this tab is not available, so go on to the next step.)
Choose a style from the Styles pop-up menu. All styles render graphics and other layout elements for building Web pages, except the one named Fern Green. If you choose Search Only or Entry Only, you can limit the features available to visitors.

THE WEB STYLE SETTING determines how the Web pages will appear and what features will be available.

5 Click the Table View tab to display its options. Use the pop-up menu to choose the database layout for displaying information in a tabular format. This will be the layout for list view, which normally only displays a few fields per entry.

THE TABLE VIEW TAB settings determine the layout of fields in the list view.

6 Click the Form View tab to display its options. Use the pop-up menu to choose the database layout for displaying record details. This will be the layout for the record details, showing all or most of the record's information. Typically, this layout includes the majority of database fields.
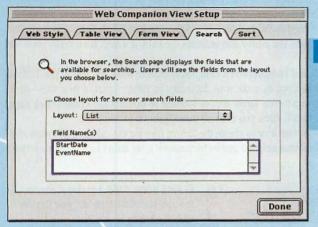
THE FORM VIEW TAB settings determine the layout of record details.

THE SEARCH TAB enables you to select a layout for search fields.

7 Click the Search tab. Use the pop-up menu to choose the database layout for displaying search fields. This will be the layout for searching the database, where the site visitor enters criteria for specific fields. It should include only the fields a visitor may want to use in database searches.
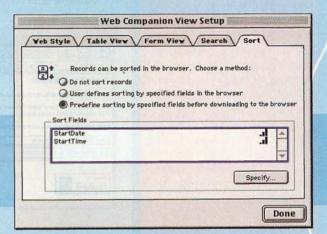
THE SORT TAB enables you to set sort options; these can include a specific sort order.

8 Click the Sort tab and select one of the sort options. If you choose the third option, you can also click the Specify button to set the sort order. This works just as it does when you're sorting records in FileMaker Pro. Click Done to save your settings. Then click OK to dismiss the File Sharing dialog box.

WHEN YOU USE INSTANT WEB PUBLISHING, FileMaker Pro creates a home page that lists all available databases.

9 Test your solution. Fire up your Web browser and use it to point to the IP address of the computer on which FileMaker Pro is running. For example, if FileMaker Pro is running on a computer with the IP address 192.0.1.2, point to http://192.0.1.2/. A Web page like the one shown here should appear, listing all of the FileMaker Pro databases accessible from that IP address through Instant Web Publishing.

10 Click the link for the database you want to open. The detail view page for the database should appear. Experiment with all of the links and buttons to see how they work.

DO YOUR OWN TWEAKS to get things how you want them.

The two most recent major releases of FileMaker Pro (4.x and 5.0) have built-in Web publishing capabilities, but these two versions handle database publishing very differently.

FileMaker Pro 4.0 and 4.1 offer both Instant and Custom Web Publishing. Instant Web Publishing is easy to set up and implement, but extremely limited when it comes to appearance and features. Custom Web Publishing is relatively difficult to set up, but powerful and flexible.

FileMaker Pro 5 improves Instant Web Publishing by offering Web styles for formatting pages. This makes Instant Web Publishing more flexible in both appearance and functionality. Custom Web Publishing, also improved for version 5, now supports XML (Extensible Markup Language), an industry standard.

If you think FileMaker Pro 5 sounds like the way to go, consider this: Version 4.x can serve databases to an unlimited number of IP addresses, but version 5 can serve databases to only 10 IP addresses during each 12-hour period. To publish your FileMaker Pro 5 database to an unlimited number of IP addresses, you need to buy FileMaker Pro 5 Unlimited, a different version of the software with a heftier price. (FileMaker Pro 5 is $249; FileMaker Pro 5 Unlimited is $999.) To develop Custom Web Publishing solutions, you'll probably want to buy FileMaker Pro 5 Developer ($499), another version of the software that includes the tools and documentation you'll need to create the required format files to a limited number of IP addresses.

If you're looking for a cost-effective way to put your database online, you'd do well to hunt down a copy of FileMaker Pro 4.0 or 4.1—it should meet your database Web publishing needs. For a budding Webmaster on a budget, it's the way to go.

Doing It The Hard Way

Building a customized database-driven Web site takes a lot more time and effort. It requires that you know either CDML (for FileMaker Pro 4.x or 5) or XML (for FileMaker Pro 5), neither of which we can teach you here. It also demands that you use a Web authoring tool to build the format files—HTML files containing CDML and/or XML—needed to make the site work.
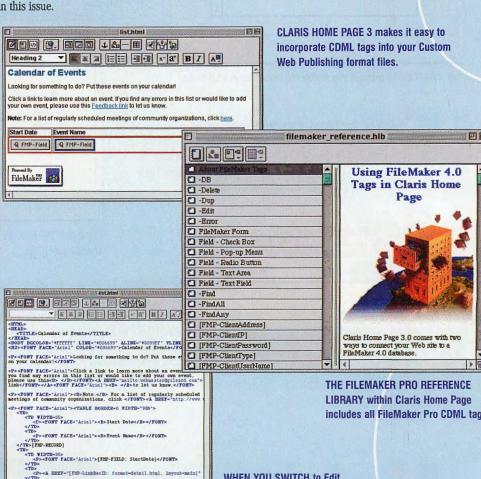
If you expect to use CDML in FileMaker Pro 4.x, it's in your best interest to invest in a copy of Claris Home Page 3. This old but still useful software program recognizes CDML and makes building format files much easier.

Claris Home Page 3 includes two libraries of FileMaker Pro CDML tags. You simply drag and drop tags into Claris Home Page documents, then customize the tags for your needs. This is the closest you'll get to building format files in a WYSIWYG environment.

You might also find Claris Home Page useful as a learning tool—use it to create format files for your solutions, then open the files with a plain text editor and examine the code it wrote. It's a really great way to learn CDML.

The benefit of all this extra work and know-how is a completely custom look and feel to the databases you publish on the Web. This enables you to make your databases an integral part of your site—heck, if you do it just right, most visitors won't even know they're looking at dynamically created Web pages straight from database information. They'll think you built all those Web pages manually.

It would take dozens of pages to explain how to create the format files for the calendar of events solution illustrated earlier on page 43. Unfortunately (or maybe fortunately!), we didn't have that much space in this issue.

CLARIS HOME PAGE 3 makes it easy to incorporate CDML tags into your Custom Web Publishing format files.
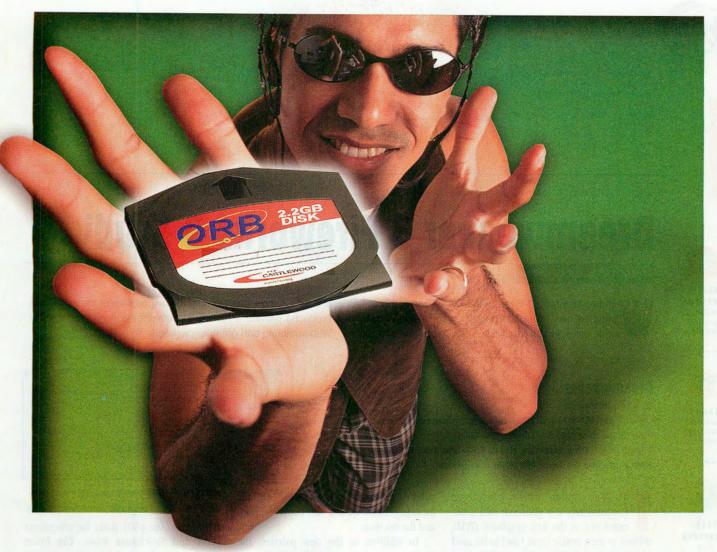
THE FILEMAKER PRO REFERENCE LIBRARY within Claris Home Page includes all FileMaker Pro CDML tags.

WHEN YOU SWITCH to Edit HTML Source view, you can see the HTML and CDML that Claris Home Page wrote.

reviews

What's Steve Jobs's favorite dance? The Macarena. Ha ha.

Dreamweaver 3 Fireworks 3 Studio

DESIGN & GRAPHICS

With Dreamweaver 3 Fireworks 3 Studio, Macromedia has bundled new revs of its popular Web design duo. Both apps are sold individually, but their increased integration and the Studio's $99 discount (below the sum of the standalone products) provide a healthy incentive for anyone looking for a Web authoring and graphics package.

FREAKIN' AWESOME
The most valuable products, the coolest gizmos.

SPIFFY
A solid offering. Overall a good investment.

YEAH, WHATEVER
A few good features, but generally a waste of time and money.

BLECH!
We hate to even blotch our pages with the thing.

FIND TRIALS OF Fireworks 3 and Dreamweaver 3 on The Disc.

Dreamweaver 3

COMPANY: Macromedia
CONTACT: 800-457-1774 or 415-252-2000, http://www.macromedia.com
PRICE: Stand-alone $299 (SRP), Studio $399 (SRP)
REQUIREMENTS: Power Macintosh, Mac OS 8.1 or later, 32MB of RAM, 20MB of free hard disk space, 800 by 600 color monitor

The Web design world considered Dreamweaver 2 a godsend, and it became one of the first graphical HTML editors to earn praise from (and to be used by) professional Webmasters. While perhaps not quite as revolutionary, Dreamweaver 3 nevertheless successfully builds on its foundation, adding enough new features and functionality to distinguish itself as a very worthy upgrade. The program retains the user-friendly interface and clean code generation from version 2, and now features powerful customization, two new object palettes, an option to import delimited data, and a way to play Flash and QuickTime movies while designing. Dreamweaver 3 is a must-have app for Web designers of any level.

Dreamweaver 3's two entirely new palettes are Frames and Characters. While we're required by decency to denounce any design heretic who would dare to use frames, it is worthwhile to note here that the new Frames palette has some pretty sophisticated creation options, including an option to create a four-page frame set with a small frame in the upper-left corner of the page. The Character palette houses hard-to-create symbols including smart quotes, the copyright sign, and the em dash.

In addition to the new palettes, the Dreamweaver 3 Common Objects palette is more robust than its predecessor. An Insert Date option, when selected, prompts the user to choose a date and time option from a list of standard types. An Insert Mail Link option takes the user through a wizard to create a mail-to link. For easy access, a new icon for sister Macromedia program

IMPORTING DATA from a spreadsheet or database into HTML tables has never been so easy.

Fireworks (see p50) joins the ubiquitous Flash and Shockwave icons. The Insert Tabular Data button is the most exciting addition to this palette. In one easy step, users can import delimited data, set it up in rows and columns, and define the parameters of the HTML table. We used this feature with great success on several different sites.

That's not to say there aren't still problems with the application. Tables still resize somewhat randomly, and the Clear Row Height and Clear Column Width buttons often offer less of a solution than they promise. You'll still also have troubles with invisible elements splitting your paragraph text, including the icons for alignment tags.

The Play button in the Properties palette lets you play rich media such as QuickTime and Flash directly from the design view. Since it doesn't support some of Flash 4's more advanced features (such as input fields for variables), only basic animations actually work. We got mixed results when playing QuickTime movies as well. When this feature

THE NEW AND IMPROVED Common Objects palette lets you insert dates, tab-delimited data, navigation bars, and more into HTML pages.

THE CHARACTER OBJECTS palette lets you add smart quotes, yen and euro signs, and copyright symbols into pages.

USE THE HISTORY PALETTE to undo steps you've performed, replay a series of steps, or add multiple steps as a command in the Commands menu.

does work, though, it's handy to be able to play multimedia while designing.

For hard-coding enthusiasts, Dreamweaver 3 adds increased functionality to its already robust WYSIWYG and hard-code relationship. You can invoke the Quick Tag Editor by simply highlighting an area of code and pressing Command-T. The selected code appears, ready for editing.

Ultimately, Macromedia's goal with Dreamweaver has always been to create a Web-design WYSIWYG tool that can meet nearly anyone's needs, and Dreamweaver 3 works to further that vision. The newly added History palette demonstrates this point perfectly. On the most basic level, this palette allows users to undo over 50 previous actions taken in page creation and modification. For advanced users, the History palette can highlight and replay various steps of actions.

But it doesn't stop there. An option in the History palette lets you save a series of steps as a command, which you can place in the Commands menu in the pull-down menu bar for future use. These customized commands are written as JavaScripts and stored as HTML documents.
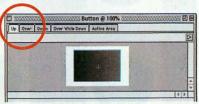
Advanced users can go one step further by using Extensible Markup Language (XML) to open and customize Dreamweaver menus. The Design Notes feature (under the File menu) uses XML extensively to let users attach notes to a file shared by groups of users. This feature enhances communication between multiple parties working on the same pages in different locations. Plus, a Synchronize Site command lets you sync files between local and remote sites.

To Dreamweaver and Back
Integrating Fireworks and Dreamweaver
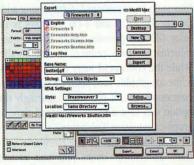
Macromedia coined the term *roundtrip editing* for the synergy between Fireworks and Dreamweaver, and this feature lets you work on rollovers and image maps without the muss and fuss of cutting and pasting HTML code. Here's a step-by-step guide to building a JavaScript rollover in Fireworks, bringing it into Dreamweaver, and then going back into Fireworks to edit the graphic. You need to know the Fireworks drawing tools well enough to create four rollover states, or instances: Up (what the user sees when the page loads), Over (the image viewed when the mouse hovers over a graphic), Down (the image viewed when the mouse button is depressed), and Over While Down (the image viewed when the user moves the mouse with the mouse button depressed).
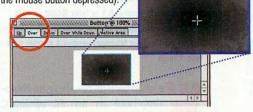
1 Create a new, empty graphic in Fireworks. Choose New Button from the Insert menu. A work area appears. Notice that there are five tabs: Up, Over, Down, Over While Down, and Active Area. In the Symbol dialog box, draw a simple rectangle and apply any desired fills and effects to it. Copy the button graphic by choosing Copy from the Edit Menu.

2 Move to the Over tab. Paste in the graphic you created in the Up tab and make any desired changes to represent the button's Over instance. Move to the Down tab, paste in the graphic from the Up tab, and make any desired changes to create the Down state of the graphic. Repeat this process for the Over While Down tab.

3 Choose Export Preview from the File Menu. Select colors for transparency with the eyedropper icon, then click the Export button. Title your graphic and save it to the appropriate folder within your local Web site structure. This will create all relevant instances of the graphic, as well as the HTML and JavaScript to make it work on the Web.

4 In Dreamweaver, place your cursor where you want to insert the imported HTML. Make sure you've saved the HTML file. Choose the Fireworks HTML option within the Media command in the Insert menu. Click the Browse button to locate the HTML file you just created in Fireworks (it will have the same name as the GIF file you created in Step 3). Open it. You've successfully generated Fireworks code and imported it into Dreamweaver.

5 To edit the graphic in Fireworks, select it on the Dreamweaver work stage. In the Properties palette, click the Edit button. Fireworks will launch and your graphic will appear. You're ready to edit and save the file again.

For the average user, Dreamweaver is an easy-to-use, powerful Web page creation tool that has some cool new features. For the large-scale site development team with an in-house programmer, Dreamweaver supports nearly limitless customization. It has a lot to offer almost everyone.—*Jude Higdon*

GOOD NEWS: History palette. Import table data (delimited data). Quick Tag Editor. Synchronize Site option. Extremely customizable. **BAD NEWS:** 24MB minimum memory required for stability. Somewhat unstable. Table cells don't maintain their integrity when pasted into text.

Fireworks 3

COMPANY: Macromedia
CONTACT: 800-457-1774 or 415-252-2000, http://www.macromedia.com
PRICE: Stand-alone $199 (SRP), Studio $399 (SRP)
REQUIREMENTS: Power Mac (G3 or higher recommended), System 8.1 or later, 64MB of RAM, 100MB of hard disk space, 640 by 480, 256-color display, Adobe Type Manager version 4 or later with Type 1 fonts
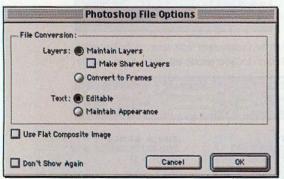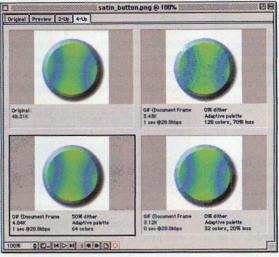
We've all been there—begging Photoshop and its myriad of tools, filters, fills, and effects to help us make that perfect button. Wouldn't it be nice, we thought, if there were some easier way to make simple graphics for the Web? Enter Fireworks. Its toolbar is easy to understand; its Stroke and Fill palettes are easily navigable; and its effects (especially the bevels) are stunning. While it is certainly not a Photoshop replacement, its vector drawing environment takes some of the pain out of creating and optimizing graphics for your Web site.

FIREWORKS 3 ALLOWS users to optimize four different versions of their graphics right on the work stage.

THE NEW OPTIMIZE PALETTE features standard indexed color palettes, adjustable color depth, increased file format options, and an additional lossy compressor for GIFs.

INCREASED SUPPORT FOR PHOTOSHOP layers and text is one of the nicest features of Fireworks 3.
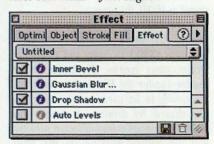
For those unfamiliar with this application, with Fireworks you can quickly create Web-ready graphics, basic Web animation using tweening, JavaScript rollovers, and sliced graphics. It also has some great optimization features.

Fireworks 3 boasts several cool new features. The new work stage now has four tabs: Original (the primary editing stage), Preview (for viewing rollovers and animations without leaving the main work stage), 2-Up (for viewing a graphic at two different color depths, compression settings, and download speeds), and 4-Up (for viewing four such combinations). A surprising addition in the 2-Up and 4-Up windows is the lossy GIF compressor, which omits image information and reduces image quality. While the concept of lossy compression on a line-art graphic runs somewhat counter to common sense, if you use it sparingly this option can save a lot of download time on graphics-intensive Web pages.

Avid Adobe fans will like Fireworks 3. To start, Photoshop layers and text remain editable when you open them in Fireworks. Also, by pointing Fireworks to your Photoshop plug-ins folder, you can apply Photoshop filters to graphics while still in Fireworks. Fireworks 3 can also export graphics into Illustrator format.

Fireworks strives to be a one-stop shopping graphics program for Web developers—integrating the basics of HTML code, JavaScript, vector and bitmapped graphics, and animation. In some ways it is successful; no other single program offers such nice scripting features coupled with such a friendly drawing environment. But Fireworks doesn't replace the need for the other graphics, Web editing, and animation programs out there; you'll still need to learn Flash, Dreamweaver, Photoshop, and Illustrator. In fact, a thorough understanding of these programs renders Fireworks almost completely superfluous. It's a good tool for beginners and can be very useful for making quick graphics and sliced images. Plus, the added integration with Dreamweaver (see "To Dreamweaver and Back," p49) certainly adds to its appeal. Intermediate and advanced Web designers, however, may find its environment limiting and its features redundant.—*Jude Higdon*

USE THE EFFECT PALETTE to apply any combination of graphic effects; you can set up this palette to include Photoshop filters.

GOOD NEWS: Increased support for Photoshop layers, text, and filters. More advanced slicing options. Extremely customizable. **BAD NEWS:** Fireworks code frequently crashes Dreamweaver. The interface is less intuitive than that of previous versions.

ViaVoice

HARDWARE

COMPANY: IBM
CONTACT: 800-772-2227, http://www.ibm.com/viavoice
PRICE: $89 (SRP)
REQUIREMENTS: G3 or faster processor, Mac OS 8.5.1 or later, 48MB of RAM, 200MB available hard drive space, audio-in jack (sorry, iBookers)
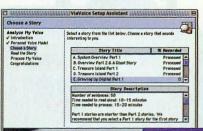
We've been waiting for continuous speech recognition on the Mac ever since IBM started airing those "I talk, it types" ViaVoice commercials. Well, ViaVoice has finally arrived, but it's not quite up to the level shown in the ads. ViaVoice does turn continuous, naturally spoken speech into a text document—but with limited flexibility. In the end, it's more of a tool suited for specific instances than a keyboard replacement.

Setting up ViaVoice is easy. Using Apple's Assistant metaphor, ViaVoice walks you through setting audio levels and creating a personal voice model. It takes some dedication, however. As part of the process, you spend an hour or so reading to your Mac, and wait another hour while your Mac creates your personal speech profile. You can break up sessions into several 15-to-20-minute periods. These are critical to how well ViaVoice can recognize your speech, so complete all of them. Multiple users can create different profiles to share the same setup.

The included hardware (a cool single-speaker headset and boom mike combination) is the best part of ViaVoice. With it, you can listen to your favorite Internet radio station or audio CD while dictating. The Speak-Pad software, however, needs a little work. Akin to a specialized word processor, Speak-Pad processes your speech and shows your words in a SpeakPad window. Its Corrections window lets you teach ViaVoice to under-

THIS SPIFFY HEADSET with custom accent colors comes with ViaVoice—too bad the software doesn't work as well as the hardware.

PHOTOGRAPH BY AARON LAUER

ONE OF THE BEST PARTS of the ViaVoice experience is reading to it during setup. This makes creating a personal voice profile a whole lot more fun than repeating individual words over and over.

stand your speech better. Once you're done dictating, you can transfer your text to one of a motley set of predefined applications, including America Online, AppleWorks, Microsoft Word, Netscape, and Outlook Express—hardly a comprehensive list. To make ViaVoice work with more applications, go to http://www.ResExcellence.com/applescripts_99.shtml and take a look at an AppleScript by Erick Tejkowski that will let you transfer text to BBEdit from ViaVoice.

Aside from a few crashes, ViaVoice worked fairly well. However, its accuracy didn't live up to the expectations commercials and demos raised. Our accuracy rate was anywhere from 75 to 90 percent, with a number of factors (such as vocabulary and room noise) behind some problems. ViaVoice does accomplish the exceedingly difficult task of recognizing speech, but just not well enough—especially when it comes to difficult phrases we tend to blur in speech.

One of ViaVoice's biggest shortcomings has nothing to do with the program and everything to do with how we envision using it. The dream of using ViaVoice to write that great novel or screenplay doesn't mesh with the creative writing process. ViaVoice is

THE MORE YOU USE the Correction window, the better ViaVoice works. Here you can teach ViaVoice the correct word.

Getting the Best Voice Recognition

Here are a few good parenting tips to make ViaVoice work for you.
READ TO IT: Spend time reading to ViaVoice's Analyze My Voice assistant.
CORRECT IT WHEN IT'S WRONG: Fix words in the correction window. It'll learn from its mistakes.
KEEP IT COMFORTABLE: Adjust the microphone close to the side of your mouth, and place the speaker comfortably against your ear.
DON'T YELL: Use a normal speaking voice when training and dictating.
SET ASIDE QUIET TIME: ViaVoice will have difficulties picking out your speech from loud background noise.

more appropriate for informal, conversational writing, such as composing a letter to a friend. It's best suited for dictation, where you read prewritten text into ViaVoice—a useful but somewhat narrow function.

IBM did a good job with the technology, but it's just not compelling enough—or accurate enough—for general use. If you suffer from repetitive stress injuries, can't use a conventional keyboard, or do a lot of transcription, then ViaVoice may be for you. Just be prepared to spend a lot of time working with the correction system and voice analysis features. However, if you just find using a keyboard frustrating, you're better off taking a few typing classes. You'll be faster and more accurate than ViaVoice, and your thoughts will soon flow like water onto the page.—*David Reynolds*

GOOD NEWS: You talk, it types. Great price. Solid hardware. Colored plastic accents. Easy setup. Big vocabulary. **BAD NEWS:** Problems with accuracy, despite training. Occasional crashes. Not really a writing tool.

Unreal Tournament

FUN & GAMES

COMPANY: MacSoft
CONTACT: 800-229-2714, http://www.wizardworks.com/macsoft
PRICE: $49.95 (SRP)
REQUIREMENTS: 200MHz 603 or faster, Mac OS 7.6 or later, 64MB of RAM, 120MB of free hard disk space

FIND A DEMO of Unreal Tournament 348m3 on The Disc.

THIS IS A SIGHT you *definitely* don't want to see—a rocket coming straight for you.

SURE, HE MAY LOOK dead, but he's just feigning—and if you turn your back on him, he'll pop up and blast you. Better put a few bullets *into him* to make sure.

It's been a long time since a game has attracted this much attention in the *MacAddict* editorial corral. Not only did Unreal Tournament tear us away from Quake III Arena and Star Wars Episode 1: Racer, but it kept us from spending the afternoon discussing Bill Gates's stepping down as CEO of Microsoft. Now *that's* a sticky game (in a good way, you creep).

The premise for Unreal Tournament is a futuristic battleground where warriors duke it out with a fiery set of weapons. While strategy *does* enter into the game, at its heart Unreal Tournament is about fragging more than you get fragged. The game builds on the awe-inspiring Unreal engine to provide breathtakingly beautiful graphics, complete with lighting effects and outdoor worlds.

Unreal Tournament provides four types of games: Deathmatch, Domination, Capture the Flag, and Assault (see "The Fantastic Four," p53 for details). Each game type is well thought out, and for once, the other types are as good as (or even better than) Deathmatch. But it's the level design that sets Unreal Tournament apart. Although levels can be small and straightforward, many are deep and complicated. Some maps feature areas where several levels converge into a vertical area, requiring players to look up and down while keeping an eye forward—a tough bill to fill.

Tactics for Unreal Tournament range from the standard kill-anything-that-moves strategy to a more sneaky hide-in-the-shadows-and-snipe. Sniping—or camping—is a legitimate and fun strategy. Players of the original Unreal will recognize some of Unreal Tournament's weapons, but a few weapons (such as the Redeemer) are new to the game. Most of the power-ups (such as invisibility and health) remain the same as well. One new, tactically useful item is the Translocator, a personal teleportation device. Just drop the homing beacon where you want and you can teleport to it at the push of a button. Don't rely on it *too* much, though—the enemy can move your beacon into a hostile environment (such as a pool of lava).

THE POWER OF THE UNREAL ENGINE lies behind one of the most visually stunning sets of effects you'll ever see, where floating worlds and asteroid combat seem strangely familiar.

Performance Boost

Unreal Tournament has tons of strategy tips. Here are some of the classics.

LEARN THE MAPS: Go over them again and again. Knowing the location of each weapon, piece of ammunition, power-up, hiding spot, and bottleneck is key.

CONTROL KEY POWER-UPS: The shield belt, the big keg o' health, invisibility, and the Redeemer—make sure you control these so your enemy can't use them.

USE THE MOUSE: If you don't use the mouse to look around, you'll never be a top player. Set the game to Mouselook in the Preferences panel and learn the technique well.
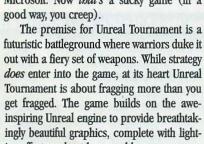
PRACTICE WITH THE BOTS: Yeah, we know, it's a drag—but the Unreal Tournament bots are actually pretty good competitors. Gain experience in the single-player levels before mixing it up online.

TRY UNCONVENTIONAL STRATEGIES: Try sniping from a protected perch or use the Feign Death command to hide from opponents, popping up behind them after they've gone past. Don't let anyone call you a no-account camper.

HOTFOOT IT! HOTFOOT IT! The action gets fast and furious in a small level with lots of players.

The system requirements for this graphics engine are unreal, too. The minimum requirements are optimistic. To play the game at a reasonable level, MacSoft recommends a G3 processor, 96MB of RAM, Mac OS 8 or later, and Rage Pro graphics. Still, this just gets you in the ballpark. To get the most out of Unreal Tournament, you should have a G3 with 120MB or so of free RAM (because the application will take up 105MB of that), and an ATI Rage 128, Formac ProFormance 3, or 3dfx 3D card. We tried playing on a Rev A iMac (with 64MB of RAM and Rage IIc graphics)

and had difficulty killing one bot on the lowest graphics settings. Frame rates were abysmally low. However, an iMac works just fine as a dedicated server to drive a LAN game.

The single most important thing you need to boost frame rates in Unreal Tournament is a good graphics card. In a 9600 with a 300MHz G3 upgrade, Unreal Tournament played very well (20 to 30 fps) via a ProFormance 3 graphics card. The card comes with one other bonus—ProCyber3D glasses, which make everything come alive in three dimensions with only

THE SERVER BROWSER built into Unreal Tournament will give you all kinds of info about Internet games, including who's playing and a snapshot of the level—in case you've forgotten.

reviews

The Fantastic Four

Here's a look at Unreal Tournament's four game types.
DEATHMATCH: In here, it's kill or be killed. Deathmatch has two variations besides the basic version. In Team Deathmatch, kill as many opponents as you can; and in Last Man Standing, strive to be the last one alive, given your limited number of lives. This is the easiest game to get under your belt, but it gets old after a while.
DOMINATION: A glorified King of the Hill, Domination is similar to Myth's Territories. The objective is to control a level's points for as long as you can. Two to four teams can play, and players can be all human or a bot-human mix. Strategically, it's a step up from Deathmatch but doesn't require *too* much team communication.
CAPTURE THE FLAG: Based again on another kids' game, Capture the Flag charges you with a dual-forked mission to capture the enemy's flag while maintaining control of your own. The level designs are especially well thought out, and our favorites include a straightforward level called Facing Worlds.
ASSAULT: On offense, you fight to achieve a series of objectives. On defense, you struggle to keep your opponent from achieving the same objectives. The player who achieves these goals in the shorter amount of time wins. This game features the most inspired group of maps and deepest gameplay, and it requires a *lot* of communication between human players. A must-play.

one small crosshair glitch. Check them out if you want truly stomach-churning play.

We had two major complaints with the game: the clunky user interface and the pathetic taunts from all players. Upon launching the game, you're faced with a custom menu/window system reminiscent of a Windows and Motif (an antique Unix windowing system) hybrid—and it's ugly. Fortunately, you won't spend much time there once you've customized your controls—saving graces include a solid server finder and adjustable window frames for extra customization. Worse than the interface, though, is the series of auto-taunts the game spews out when someone makes a kill. Some taunts, such as "You suck," don't add anything, and a few are downright offensive (even to us). Fortunately, you can turn off auto-taunting.

Unreal Tournament is a killer addition to the first-person shooter genre, and it far outshines the demo version. Quake III Arena, Unreal Tournament's closest competitor, isn't nearly as addictive, and the levels and game variations don't seem as well thought out. For our money, Unreal Tournament is *the* shooter of the hour.—*David Reynolds*

GOOD NEWS: Great action. Killer graphics. Deep gameplay. Complex, well-designed levels.
BAD NEWS: Heavy system requirements. Downright odd user interface. Lame auto-taunts.

MacInTax Deluxe 1999

PRODUCTIVITY

COMPANY: Intuit

CONTACT: 800-446-8848 or 650-944-6000, http://www.macintax.com

PRICE: $49.95 (includes one free copy of MacInTax State via rebate)

REQUIREMENTS: PowerPC processor, System 7.5.3 or later, 16MB of RAM, 30MB of free hard disk space (45MB recommended), 2X or faster CD-ROM drive (4X recommended)

REQUIREMENTS FOR INTERNET ACCESS: 14.4-Kbps modem (28.8 recommended), Netscape Navigator or Microsoft Internet Explorer (version 4.0 or higher)

HELP! I NEED SOMEBODY. MacInTax explains tax forms and regulations in clear, easy-to-understand English.

In the 16 years that Intuit has been developing and selling tax-preparation software, it has almost cornered the market on computerized preparation—with good reason. The Deluxe edition of MacInTax includes several features not available in the regular edition, including *Money* magazine's "Income Tax Handbook," a Roth IRA planner, and a life events planner. It's an excellent tool for efficiently and accurately working through and filing your personal income tax return.

The latest version of Quicken MacInTax Deluxe is designed for users of Form 1040, the IRS's standard individual income tax form. Using MacInTax is a simple step-by-step process. The program leads you through entering your personal financial information, fills out the appropriate forms using your data, does the math, and quickly determines whether you owe money or have a refund coming. Until you actually file the return, you can keep changing information as much as you like. At every stage of the process, MacInTax offers plain-English definitions and explanations of IRS jargon in easy-to-access hyperlink format. For those who respond better to visual cues, MacInTax offers short but helpful QuickTime presentations on a wide
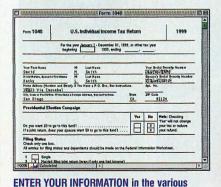
variety of tax topics, including entertainment deductions, royalty income, and home office use.

MacInTax also covers a medley of tax circumstances that don't occur in the average household. Are your gambling losses no greater than your winnings? They're deductible. Are you or is your spouse a rabbi, cantor, or minister? Then pretty much anything to do with housing is tax exempt. (Warning: The IRS frowns on people who form a religion solely to make that new G4 tax-deductible.)
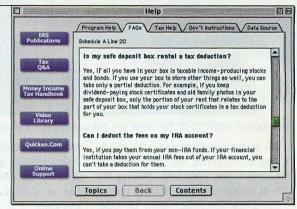
Once you finish your return, you can file it electronically through Intuit and pay outstanding taxes with a Discover card. MacInTax's purchase price includes one free federal electronic filing and up to four additional e-filings at $10 each. Mindful of privacy concerns, Intuit uses strong encryption and includes a copy of Microsoft Internet Explorer with 128-bit encryption on the CD. If you prefer snail mail, you can print your return and drop it in the post. Intuit says if you pay a penalty due to a MacInTax error, it will reimburse you for the amount plus interest. We called Intuit to see if this has actually ever happened—

but if so, the company's not talking about it.

Although MacInTax handles only federal taxes, buying it entitles you to a free copy of MacInTax State via rebate (you pay $30 up front). Not surprisingly, MacInTax can import data from last year's MacInTax or TurboTax (the PC version of MacInTax). If you use Quicken 7 or later, you can import tax-related transactions as well (although you must export the data from Quicken first).

MacInTax comes with reasonable system requirements: Just about any Power Mac can run it. It also takes full advantage of your Internet connection, checking for program updates and new tax laws and regulations.

We do have a few minor gripes. There's no upgrade price for users of previous versions, and you can't update the list of available IRS publications over the Internet, forcing you to go to the TurboTax Web site for new data. Adding another iota of inconvenience, Intuit neglected to hyperlink its Web site, and you can't copy it to the Clipboard, so you will have to type it in to your browser manually.

However, these issues don't belie the fact that MacInTax is an excellent way to prepare your tax return. It cuts through the maze of rules and regulations, making them understandable. You still have to pay taxes, though. Not even a computer can get you out of that.—*Mark D. Shuchat-Marx*

YOU'VE GOT TO START SOMETIME. With MacInTax, you simply fill out an information sheet.

ENTER YOUR INFORMATION in the various worksheets, and MacInTax puts it in the right places on the tax forms.

GOOD NEWS: Uses plain English. Excellent help resources. Can file taxes and retrieve the latest tax updates via the Internet. **BAD NEWS:** No upgrade offer for owners of previous versions.

Dramatica Pro 4.0
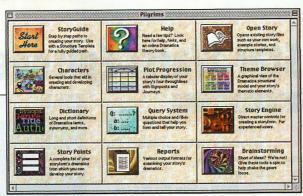
THE MAIN DRAMATICA INTERFACE is little more than a series of buttons that lead to the program's various tools.

W e've all had those moments of brilliance that start with: "Wow! I just had the greatest idea for a story!" Most of the time, the complexity of storytelling keeps our half-written scripts hidden in a shoebox. Relief is out there. Dramatica Pro 4.0 offers in-depth help for writers developing complex short stories, novels, screenplays, or television shows.

Billed as "The Ultimate Creative Writing Partner," Dramatica walks writers through various stages: creating deep, complex characters; defining the web of relationships between them; developing a plot; and weaving a complex and believable story. While the program doesn't function as a word processor—you'll need to write your masterpiece in another application—Dramatica does fit your ideas into *storyforms* (the program boasts over 32,000 of them) that keep the dramatic action straight.

Dramatica installs easily and painlessly, and the program is rock-solid stable—we didn't have a single hiccup or crash during our *many* hours of use. The basic interface is simple, featuring 12 Desktop Tiles (a bunch of buttons in a resizable window) that take you to Dramatica's primary tools. From here, you can work on characters, plot progression, story points, themes, or any number of other areas, and start the StoryGuide.
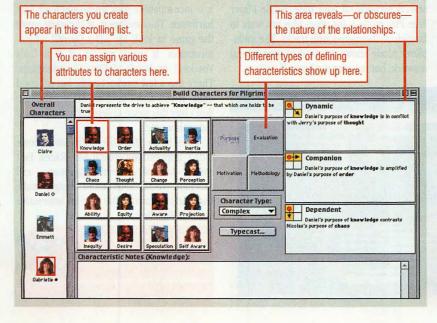
Folks new to Dramatica will want to dive into the StoryGuide. This interactive, three-level questionnaire brings much of Dramatica into play: level one asks about 60 questions, level two asks about 75, and level three asks about 250. Going through a level three StoryGuide is exhausting, and you're probably best off doing it over several days. In the end, though, you'll know your story and characters much better than you did before.

StoryGuide's questions dig deep. You have to describe your characters, understand what makes them tick, and then assign them dramatic functions. The program asks you about ways your plot will build dramatic tension and how the story will resolve—or not—in the end. All of this depth and complexity is helpful but dangerous: It's easy to get lost in some of the jargon Dramatica Pro throws around (particularly when it's assigning attributes to complex characters). The program tries to keep the story manageable and the relationships clear, but in some areas the model feels a bit clunky and artificial. Just remember, you don't have to use everything you make in Dramatica. It's just a tool.

Aside from the main set of tools, Dramatica features a couple of interesting brainstorming widgets: the Spin-The-Model tool (which picks a random storyform for you) and the Character Generator (when you need a character but can't seem to come up with one). Dramatica also lets you print out any number of reports during your creative process and even lets you tinker with the story engine directly—if you *really* know what you're doing.

Dramatica Pro 4.0 is a serious character and story development tool for serious writers, though perhaps a bit too rigid for some. Maybe now you can finish that brilliant story lurking in the back of your head.—*David Reynolds*

And You Thought Real People Were Complicated

Dramatica Pro offers lots of tools to help you develop characters and weave them together in relationships, but sometimes the tool set can get a little too complex.

The characters you create appear in this scrolling list.

You can assign various attributes to characters here.

This area reveals—or obscures— the nature of the relationships.

Different types of defining characteristics show up here.

GOOD NEWS: Provides structure and tools to build a solid story. Deep tool set. Good focus. Solid print manual. Comes with a comic book.
BAD NEWS: Some interface limitations. Can be limiting or difficult to use for intuitive writers.

Star Wars: Episode I Racer

FUN & GAMES

COMPANY: LucasArts
CONTACT: 888-532-4263 or 415-507-4545,
http://www.lucasarts.com
PRICE: $39.95 (SRP)
REQUIREMENTS: G3/233 or faster, Mac OS 8.1 or later, 32MB of RAM, 12X CD-ROM drive, 4MB of video RAM, ATI OpenGL hardware acceleration.

FIND A DEMO of Star Wars: Episode I Racer on The Disc.

While *Star Wars: Episode I—The Phantom Menace* was no *Empire Strikes Back*, even the most jaded *Star Wars* fan had to be impressed by the movie's Pod racer scene. LucasArts' first game based on the film (and its first major Mac game in years) is Star Wars: Episode I Racer, an extended re-creation of the racer sequence. Before you ask—yes, you get to race on Tatooine; yes, you get to kick Sebulba's butt; and yes, it feels exactly like the movie. Hands down, Racer is the best film-to-game translation ever done.

You begin the game by choosing from several pod racers and pilots. Each racer has different specs such as turning, acceleration, and top speed. Pick the racer that best suits your style and hit the tracks. If you beat the racer favored to win, you win that pod racer. You also earn truguts, which you can spend upgrading a racer's components in Watto's shop. You can transfer components between racers, so if you start with Ody Mandrel's ship and switch to Abe Endicot's racer, you keep all the parts you've purchased.

There are racecourses on eight unique worlds. One world is underwater. Another world is an icy Hoth-like planet with twisty

caverns and frozen tundra straightaways. There are essentially three circuits: novice, intermediate, and pro. If you beat a circuit (a set of eight races), you race in an invitational circuit at the same player level. The novice circuit is laughably easy, but your competition races considerably faster on all the other circuits. The courses themselves are very well designed, with lots of hairpin turns, branching pathways, and secret paths that can shave several seconds off your time. Single Player Free Play mode is for pilots who just want to familiarize themselves with tracks. The multiplayer mode allows you to race over a local network, but not over the Internet.

RACER IS ARGUABLY one of the most successful translations to date from a film to a game.

Graphically, the game is stunning, but the sound is absolutely mind-blowing. Each racer has a distinct engine sound, and both Anakin and Sebulba's racers are dead-on. You don't have a complete sense of spatial sound positioning, but the stereo is very well done—when you brush past another racer's pod, you can hear the Doppler effect as you blow by.

The one major downside to Racer is that it is incompatible with pretty much all 3dfx hardware. The developers at LucasArts wrote the game to look for ATI's OpenGL implementation. It won't run at all if it finds Voodoo2 or Voodoo3 OpenGL extensions. There are a few workarounds, but no good ones. If you don't have an ATI accelerator, don't buy this game unless LucasArts comes out with a patch.

Even if the *Star Wars: Episode I* movie didn't impress you, you'll like Racer. Fast racing, lots of customizing options, and excellent visual and sound design make LucasArts' return to the Mac an impressive one.—*Rick Sanchez*

Upgrade to Win

Racer's intermediate and pro circuits are brutal, and your greatest advantage is an upgraded racer. Before you begin the first circuit, change the winnings setting to Winner Take All. Place first in every race and you'll earn the maximum amount of truguts to spend on your pod racer. Come in second, though, and you'll get nothing. Make sure you buy pit droids and improve your top speed, traction, turning, and acceleration.

REVISIT WATTO'S PARTS SHOP to purchase upgrades for all of your racer's systems.

GOOD NEWS: Awesome graphics. Huge variety of pod racers and upgrades. **BAD NEWS:** Incompatible with all 3dfx-based cards. Very easy first circuit.

Mixman Studio Mac

MULTIMEDIA

COMPANY: Mixman
CONTACT: 415-403-1380, http://www.mixman.com
PRICE: $79.95 (SRP)
REQUIREMENTS: PowerPC 200MHz or faster, System 8.1 or later, 32MB of RAM (64MB or more recommended), 35MB of hard disk space (275MB for full install), requires OMS for MIDI support

TWO TURNTABLES AND... a bunch of lights. They're more than just pretty—they're the placeholders for your audio tracks.

In recent years, the DJ has taken on the role of musician, producer, and artist. Today's top DJs are known for their talents in taking an existing song—be it heavy, happy, or sappy—and turning it into a completely different tune. This is the art of remixing—laying down an isolated audio track from a song—say, the vocal—on top of a different groove. DJs can also slow down or speed up an audio track to fit a totally different rhythm. That's the

THIS MICROPHONE DOESN'T LOOK LIKE anyone's used it much. And you probably won't use it much either, since Mixman Studio Mac already includes a wealth of sounds.

magic of remixing, and that's what you can now do with Mixman Studio Mac.

The program is composed of two environments: the Remixing Studio (where you'll spend most of your time) and the Recording Studio. The Remixing Studio screen is comprised of two turntable

motifs, where you can load up to 16 different tracks, 8 per turntable. When you've loaded all your tracks, press the play button to perform a rudimentary remix. Record this performance, then later export it as an audio file that you can play with most audio players or burn to an audio CD. The Recording Studio screen has the sole function of recording or importing audio.

At first glance, Mixman Studio seemed like nothing more than a plaything geared toward adolescent techno-heads. When we tried out the different styles of music, though, the program's alluring performance controls entranced us. The control you have over a simple series of on/off buttons makes using the program an addictive experience. This live, intuitive approach to remixing is both fun and a key selling point for Mixman Studio. It's designed for ease of use—an *alternative* to the traditional graph-and-timeline approach to digital remixing rather than a *replacement* for popular programs like Digidesign's Pro Tools and MOTU's Digital Performer.

When you tire of the built-in sounds (and there are literally hundreds), you can go to the Mixman Web site and download DPlates, Mixman Studio Mix files complete with TRKs (tracks) recorded by artists such as Ice-T, Luscious Jackson, and Missy Elliot. Using DPlates, you can create your own remixes of these artists' songs. If that's not enough, you can visit the Web and

purchase libraries containing TRK files in different styles, called Soundiscs.

The beauty of the program is its ability to change the tempo of the tracks without altering their pitch. This advanced feature is generally found only in specialized programs. Unfortunately, you can only use it with the TRK files in the Remix screen. These files differ from AIFF files in that you can speed them up or slow them down on the fly (see "What's the Difference?", below).

The Mixman Web site is a great resource for TRK files, but sooner or later every remixing DJ develops a yen for self-expression—you will want to use your own sounds in Mixman Studio. The program allows you to record audio directly into the Recording Studio. However, the audio-editing features here are severely lacking. There are basically two useful controls for importing your own audio: auto-trimming and auto-gain. It is not possible to edit your audio loops accurately in Mixman. The manual suggests using a program specifically suited for that. It is also not possible to create TRK files out of your recorded or imported AIFF files. Again, the manual specifies other programs. If Mixman Studio weren't priced so reasonably, we would consider these limitations serious faults. Though the lack of these features poses an inconvenience, including them would hike the program's price to an unattractive level.

Those interested in the remixing revolution will find Mixman Studio Mac a fun program to use. When you register, you have access to DPlates, which makes the remixing experience worthwhile. This program's usefulness is definitely more than skin-deep.—*Andrew Tokuda*

FIND A DEMO of Mixman Studio 1.0 on The Disc.

TRK and AIFF Files
What's the Difference?

AIFF is a standard Mac audio file format equivalent to the popular WAV file format on the PC. It is purely audio, with no additional information. TRK files are proprietary to Mixman Studio. They contain extra information that enables the program to play faster or slower without affecting the pitch, or higher or lower without affecting the tempo. By creating "slices" in the audio file, you can squeeze it together or spread it apart in time, or play it at a different pitch in real time (you don't have to convert the pitch or speed of a TRK file before using it in Mixman).

GOOD NEWS: Simple interface. Inexpensive. Artist contributions, support. Loads o' fun. **BAD NEWS:** Limited audio-editing capabilities.

reviews

Umax Astra MX3

HARDWARE

COMPANY: Umax
CONTACT: 800-232-8629 or 510-651-4000, http://www.umax.com
PRICE: $179 (SRP)
REQUIREMENTS: Power Mac, Mac OS 8 or later, 32MB of RAM

Umax designed the MX3 scanner exclusively for the Mac market. Push-button scanning, USB and SCSI connections, 600-by-1200-dpi resolution, and excellent software add up to a rock-solid product that would satisfy pretty much any Macintosh owner.

Every ounce of effort put into the MX3 contributed to one goal—making the product easy for consumers to use—and Umax has succeeded. The MX3 will connect to whatever Mac you own (iMac or 7500), as it sports both USB and SCSI ports. Buttons on the front of the scanner also put the most common functions at your fingertips: Press one button to scan, press another to copy via your printer.

Umax's latest version of its VistaScan software is also very well designed. A two-tab interface toggles the VistaScan software between Beginner and Advanced tabs. The Beginner interface is stripped down but fully functional, with iconic representations of the different scanning controls. A postprocessing control panel, for

OFFERING BOTH USB AND SCSI, the Astra MX3 is a great scanner for owners of just about any Mac, new or old.

example, displays icons of the final image flipped in 90-degree increments—a useful function if you're scanning a horizontal image into the MX3's vertical surface and want to reorient it. The quality of the scans produced with the default Beginner settings closely approached the quality of a scan done through the Advanced interface with contrast, brightness, and color all set manually.

Overall image quality was excellent, delivering solid blacks, vibrant colors, and good shadow detail from almost any source. The MX3 did have some trouble—it produced zebra-stripe patterns when scanning some photo finishes and certain glossy paper stocks found in product catalogs.

The Astra MX3 has an 8.5-by-11.7-inch scanning surface, which is just slightly larger than standard letter size. The MX3 can scan documents at a true 600 by 1200 dpi. Using

software interpolation, the scanner is capable of producing images at 9600 by 9600 dpi with impressive fidelity.

You have the option of doing your scanning in several different modes: black and white, 12-bit gray scale, and 32-bit color. You can also scan in 42-bit color via Umax's bit-enhancement software.
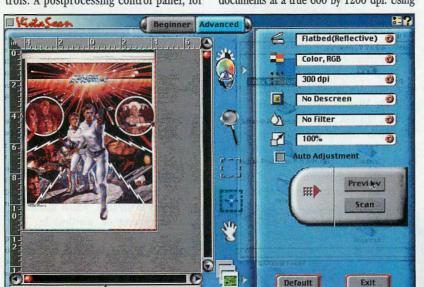
One benefit of the MX3 is that it can grow with you as your scanning needs increase. Many low-cost consumer scanners don't have the option of scanning transparencies like photo negatives or slides. While the MX3 doesn't offer this capability out of the box, you can get a transparency adapter that will allow you to scan transparent documents of up to 4 by 5 inches.

To get you going, Umax has included a pretty good software bundle. In addition to the VistaScan software, you get Adobe's PhotoDeluxe image editor, Caere OmniPage LE text recognition software, and Presto PageManager and PhotoAlbum document management tools.

On the negative side, the plastics that Umax used for the scanner don't feel as strong or durable as those used in some of the older Astra products. In fact, the scanner's lid feels downright fragile. At $179, the Astra MX3 is also slightly pricier than many USB-only scanners.

If you have an older SCSI Mac and are looking for a scanner that can grow with you, or even if you have a newer USB-only Mac, the Umax Astra MX3 is a great solution. Good color fidelity, push-button scanning, and a full software bundle all add up to a solid product at a reasonable price—just for us Mac users. And we're worth it.—*Rick Sanchez*

BY THE POWER OF GRAYSKULL, Umax's VistaScan software makes scanning easy with a well-designed graphical interface for just about every function.

GOOD NEWS: Push-button scanning. Excellent software. **BAD NEWS:** Plastic casing feels cheap.

KPT 6

DESIGN & GRAPHICS

DEVELOPER: MetaCreations
CONTACT: 800-846-0111 or 805-566-6200,
http://www.metacreations.com
PRICE: $199.95 (SRP)
REQUIREMENTS: Power Macintosh (G3 or G4 recommended), Mac OS 7.6.1 or later, 32MB of RAM (96MB recommended), 65MB of free hard disk space, Adobe Photoshop 4 or later

Once upon a time, swaggering Teutonic pixelmeister Kai Krause revolutionized the Photoshop world with his CHOPS (channel operations) tips for eye-popping effects, first posted on AOL in 1992. Published by HSC late that year, Kai's Power Tools became a must-have for the dedicated Photoshop geek. Over the years, KPT steadily evolved under HSC's successor, MetaTools, which later became MetaCreations; each successive suite offered amazing new filters while—not incidentally—providing a quirkedelic test bed for Kai's extremist GUIs. Now KPT 6 is here, and it's the last version you're ever going to see, as MetaCreations heads for the hinterlands in pursuit of its 3D e-commerce strategy. Does KPT 6 measure up to its predecessors?

That depends on whether you actually want to get some use out of your filter investment. Sadly, KPT 6 extends the Kai concept of cool uselessness into new realms that version 5 merely hinted at. The interfaces are mostly uniform now, sharing the familiar look of other MetaCreations products like Bryce and Poser, but they still use conventions you'll never see elsewhere in your Mac experience.

SLATHER ON THE SLIME with KPT Gel.

KPT 6 contains eight all-new plug-ins (KPT Equalizer, Gel, Goo, LensFlare, Materializer, Projector, Reaction, and Turbulence) and two bonus filters (KPT Scenebuilder, for manipulating and texturing 3D objects from the now-discontinued RayDream Studio, and KPT SkyEffects, for making sky backgrounds).

For practical work, we liked KPT Equalizer—a set of sharpeners designed to work a bit like an audio EQ. You won't find anything here you can't do in Photoshop, but for once the KPT screen offers a clear though limited set of options and, by emphasizing pixel radius, provides an alternative approach that will help you better understand what sharpening operation to use in various situations.

The coolest filter, especially if you liked playing with slime as a kid, is undoubtedly KPT Gel. You'll enjoy painting thick amoeboid gelatin over your image, with control over translucency, lighting, and surface qualities. KPT is the perfect tool for making blue gelcap-looking blobs in the upcoming Aqua style of Mac OS X.

KPT Materializer lets you fiddle with bump and texture mapping. The Reaction plug-in uses an algorithm to create organic abstractions based on your image. Unless you want to build a graphic style around the results, you won't use Reaction much. (3D artists may like it for building organic texture maps.) The same goes for KPT Turbulence, which

A BONUS FILTER, KPT Sky Effects (formerly Rayflect Four Seasons), creates atmospheric backgrounds.

sends a distortion wave bouncing around the image. You can make movies of the process (and in fact, Turbulence would make a lot more sense as an After Effects plug-in) but after an initial ooh and ah, you'll never use it.

KPT Projector improves on Photoshop's Free Transform by providing *z-axis* translation, warping, and tiling. You can't, however, preview against a background layer, so you can't see your distortion in context or easily use Projector to, say, place a label on a box seen in perspective from a particular vantage point. Projector doesn't provide any numerical input, either.

KPT LensFlare is not in the same league as Knoll Lens Flare, a competing plug-in from Puffin Designs; if you need flares, get the Knoll product. And Goo—well, it's far better stripped of the cutesy-totalitarian GUI it shipped with as a stand-alone app, but so many products have bundled it over the years that we bet you have it already.

We wish we could say that KPT 6 is a necessity (as versions 3 and before were), but chances are you've already got some of its tools or even better ones already. Even if you don't, you're better off shopping around for individual plug-ins rather than buying a predetermined set. And if you're new to Photoshop—well, frankly, you don't need KPT 6.—*Steve Anzovin*

GOOD NEWS: KPT Gel is fun and slick. KPT Equalizer offers a good approach to sharpening tools.
BAD NEWS: Too many useless filters. Future of product and company is in doubt.

Kids' Stuff

Spy Fox 2: Some Assembly Required

COMPANY: Humongous Entertainment
CONTACT: 800-499-8386 or http://www.humongous.com
PRICE: $24.99 (SRP)
REQUIREMENTS: Power Mac, System 7.5.3, 16MB of RAM, 2X CD-ROM drive, 256-color monitor or better

Junior sleuths, grab a Shirley Temple—shaken, not stirred—and help secret agent Spy Fox stop the nefarious Napoleon LeRoach from destroying the world. This well-conceived story keeps players ages 5 to 10 engaged in the plot, and has fantastic animated films with talking characters that kids can sit back and watch.

Although it mostly offers pure entertainment, Spy Fox 2: Some Assembly Required does challenge a child's basic memory and deductive reasoning skills, and the James Bond theme makes it easier for adults to sit through. Players collect secret gadgets from the Spy vending machine and chat up characters to get clues on how to stop LeRoach's evil Dogbot from unleashing a destructive rampage on the world. Ms. Monkey Penny and Professor Quack assist Spy Fox, providing clues for young detectives who may get stuck. For distraction, players can also take time off from their sleuthing duties to play a Space Invaders–style video game, Things from Space.—*Keelin Devincenzi*

MY NAME IS FOX, Spy Fox.

GOOD NEWS: Entertaining animated movies and cool characters both adults and kids will like.
BAD NEWS: Kids will solve the mystery in a weekend and never pick up the game again.

Yoda's Challenge

COMPANY: Lucas Learning
CONTACT: 888-532-4263, http://www.lucaslearning.com
PRICE: $29.95 (SRP)
REQUIREMENTS: Power Mac, System 7.6 or later, 32MB of RAM, 30MB of free hard disk space, 4X CD-ROM

Yoda has six missions on the planets Naboo and Tatooine for wannabe Anakin Skywalkers. The game, targeting ages six through eight, is well organized into activities that feature 20 to 40 puzzles on four different levels, gradually increasing in difficulty. However, the activities become very repetitive after completion of just a few puzzles. The animation and graphics are great, but require a fairly up-to-date system.

Activities include a race between Queen Amidala and Jar Jar Binks, which tests critical thinking skills. Capturing destroyer and battle droids challenges rhythm and memory abilities. Unscrambling Queen Amidala's computer requires excellent spatial relation and model-building skills, while players use simple grammar to help C-3PO tell illustrated stories about the young Anakin Skywalker. Finally, a sense of direction and map-reading skills guide kids toward precious gems needed to unlock doors that conceal Gungan relics. Added bonuses include printouts of stories and songs and a certificate of completion, signed by Yoda, for young Jedis who manage to solve all the puzzles.—*Keelin Devincenzi*

GO YOU MUST.

GOOD NEWS: Great characters that kids like. Lots of animated shorts. Narrated by Yoda. **BAD NEWS:** Some games are way too easy and others are too challenging for an eight-year-old.

Thinkin' Things Galactic Brain Benders

COMPANY: Edmark
CONTACT: 800-691-2986, http://www.edmark.com
PRICE: $29.95 (SRP)
REQUIREMENTS: Power Mac, System 7.1.2 or higher, 16MB of RAM, 7000K of free hard disk space, 2X CD-ROM drive

Program a football halftime show or build a virtual maze—Thinkin' Things Galactic Brain Benders offers activities that test and build a child's cognitive skills. The program intends to make educational subjects fun—a goal it achieves with only moderate success.

The Stellar Stock Exchange introduces kids to foreign languages as Stocktopus trades fruit throughout the world. The Photo Twister can alter images with 22 special-effects tools, and Far Out Physics introduces basic concepts like gravity, friction, and motion.

The graphics are well done, and it's easy to navigate between activities. Still, as much as you may want your kids to grasp physics, they'll probably prefer to manipulate funny photos instead.—*Keelin Devincenz*

SOME BRAIN BENDERS have bite; others just bite.

GOOD NEWS: Planetary Programming and Photo Manipulation Mischief offer almost limitless opportunities to create unique games. **BAD NEWS:** Recommended for ages 8 to 12; those on the older end will find some activities boring.

reviews

iSub

HARDWARE

COMPANY: Harman Multimedia
CONTACT: 877-266-6202, www.harman-multimedia.com
PRICE: $99 (SRP) at The Apple Store (http://www.apple.com) or Apple retailers
REQUIREMENTS: Slot-loading iMac or iMac DV, USB port

Like a Fabergé egg, the Harman Kardon iSub is small, fabulous, and not terribly useful. A subwoofer is typically a monstrous affair, whose sole purpose is to unleash audio terrorism and aural destruction. To Harman Kardon, the subwoofer has become an icy, scyphozoan clay with which to render the sculptor's ultimate triumph of form over function. And for trendy iMac DV types, this just might be indispensable.

The unit's diminutive dimensions (just over 10 inches high) and undeniably pretty design mean it looks equally at home side by side with your iMac or on the floor. The unit's rubber-soled feet insulate most surfaces from excessive vibration, and its only practical purpose is to supply richer bass to movies, games, and music. A slider, which doesn't appear in your sound panel until you download the latest Mac OS 9 audio update, only allows you to adjust the iSub's volume. For more subtle frequency adjustments, use a music application like SoundJam.

At a dainty 20 watts, this device doesn't exactly "go up to 11," but it provides ample backing for the already well-adjusted Harman Kardon speakers found in newer iMacs. But let's just be honest, shall we? If you buy this bauble, you won't be interested in the 6-inch woofer or the tight and tidy 44Hz bass response. You won't even care that the USB interface swallows up more of your already limited input. All you'll care about is that it's made of glassy, transparent, bulletproof plastic—and very few playthings have ever looked cooler.—*Frank O'Connor*

HEY GOOD LOOKIN'! Harman Kardon's iSub adds a whole lot of style to a decent amount of bass.

PHOTOGRAPH BY AARON LAUER

GOOD NEWS: Reasonable price. Stunning good looks. **BAD NEWS:** New iMacs only. Uses up USB port. Not awfully powerful.

Quake III

FUN & GAMES

COMPANY: Activision
CONTACT: 310-255-2050, http://www.activision.com
PRICE: $49.99 (SRP)
REQUIREMENTS: G3/266 or faster, iMac Rev B or higher; Mac OS 8.6 or later; 64MB of RAM; 40MB of free hard disk space; virtual memory; 4X CD-ROM drive; 3D-accelerated PCI or ARP video card with at least 6MB of VRAM; Apple OpenGL 1.1.2 or higher support

FIND A DEMO OF Quake III Arena 1.0 on The Disc.

So it's finally here, and remarkably soon after the much-lauded PC version—Activision's Macintosh iteration of Quake III. Was it worth the wait? Does it function well on the Mac OS? Does there really have to be so much blood?

The gameplay is, if anything, even more simplistic than in Quake II. Gone are the convoluted switch puzzles, the boss monsters, and the plot. Apparently this year, Deathmatch is the vogue de jour. Activision has designed Quake III from the ground up as a purely multiplayer experience, like rival shooter Unreal Tournament. Frankly, the choice to go multiplayer seems a little obscure, given that the most successful shooter in recent memory was Valve's single player-oriented Half-Life (sadly no longer coming to Mac).

Id, the company that developed Quake, has opted for the now-hackneyed Space

THE BOUNCE PADS CAN LOFT YOU to some pretty impressive and dangerous heights. A fall from here could kill you.

Dungeon design ethic, but this time hasn't even bothered explaining why, where, or what our hero is doing in said Space Dungeon. He's just there, trapped with a motley crew of skeletons, dominatrices, disembodied eyeballs, and Space Commandos. In the single-player game, you progress through these dungeons one at a time by defeating its denizens. You can complete some single-player levels more quickly than others, and it can get tedious if those levels drag on too long. The multiplayer Deathmatch game lets you pick new areas at will, and there are two built-in Capture the Flag game arenas. This mode isn't Quake III's strong point, but user-designed levels might boost it in future.

Quake III massively improves the feeling of (homicidal) community by display-

ing your targets' names as your reticule passes over them. So if you're playing against, say...your grandmother, her name will be perfectly visible as you rail-gun her right through the dentures. This small detail adds invaluable atmosphere to a duel. You can also type urbane and witty commentary, such as "You smell like butt," at any time.

This version changes the weaponry slightly. The base weapon is a machine gun, and if you run out of bullets, you get a glowing fist with which you can smack other players upside their heads. Completing such a maneuver results in the embarrassing (for your opponent) announcement of "Humiliation!" in a suitably bombastic tone. There are also old standards like the shotgun, rocket launcher, and rail gun. The BFG (big, uh, freakin' gun—no kidding) is back too, although now it's a noisy and visceral plasma-rocket launcher rather than a big energy weapon.

The control you have over the in-game graphics is impressive and, more important, practical. Depending on your setup or what experience you want, you'll have to tweak all of these settings. You gain performance boosts by switching from Lightmap to Vertex lighting, for example. You will need a pretty hefty Mac to run it, though—anything less than a G3 is a no-go (iMacs are just fine), and without at least an ATI Rage graphics card, you might as well forget it. With those specifications, though, Quake III is one of the prettiest games ever to grace a screen.

Multiplayer games are a breeze to set up. If you're connected by LAN or ISP, the software searches for available games, and

SOMETIMES THINGS GET a little too busy in the corridors, but it gives you a better chance with a smaller weapon.

The Evil Art of
Sir Campsalot

We have a terrible confession to make. We are the world's biggest campers. In fact, one of our chosen Quake names is SirCampsalot. Camping, for those who aren't au fait with Quake parlance, is the nasty habit of hiding in one spot and shooting more-honorable players as they run by. But we can explain this appalling behavior. For us, camping is an art.

We're not content to find a little hole or ledge and wait for a cheap shot. No, we take camping a little bit further. Our victims must be simultaneously baffled and thrilled. As a rail-gun slug passes through their brains, our "canvases" must think, "Where in God's name was that bastard hiding?".

Allow us to elaborate a bit and show you one of our secret spots. In the level called Dredworks, there's a high ledge above the south pool. If you look to the left from that ledge, you'll see a red buttress of sorts. You can hop on to it with a well-timed jump. More advanced players might even rocket-jump to it. From there, you can reach otherwise inaccessible parts of the game's ceiling and blast foes with impunity. It's very unlikely that another player will spot you, unless you choose a horribly garish weapon, like the BFG. There are other good hiding places, but we wouldn't dare ruin the game by telling you where they are.

FIRST, GET UP here and jump over to that red buttress. It's really quite simple.

THEN YOU CAN JUMP over to here with ease, and start camping.
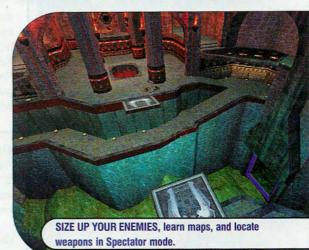
THIS IS WHAT HAPPENS when you get spotted, so stick with stealthier weapons.

you can set up your own in a couple of clicks. Connection speeds are often superior to those on PCs with similar setups, and the Mac platform is very stable during online games—yes, even on a 56-kbps connection.

It is possible to enjoy this game on your own—but barely. The software includes bots—computer-controlled drones that behave as much as possible like human opponents. Of course they're either very stupid or ridiculously accurate, reflecting perfectly the nature of the computers controlling them. That feeling of disjointed competition is what makes the single-player experience suck. In addition, you won't feel much sense of pride (or much of an adrenaline rush) when you bump off yet another bumbling computer-controlled moron.
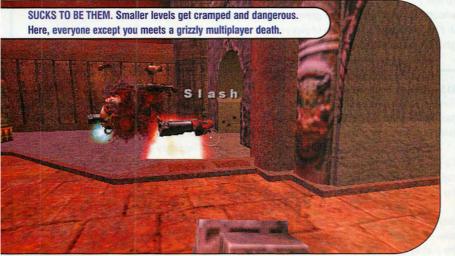
The bots can also feature in multiplayer games and on a small LAN. In a head-to-head match against a human buddy, their inclusion makes the more cavernous levels a lot more interesting. Quake III permits a remarkable amount of customization—from the usual bits and bobs such as controls and graphic detail, all the way up to changing the physical appearance of in-game characters and even implementing your own level designs (using third-party software).

Gameplay is the mother lode any designer digs for, and in this regard Quake III is solid gold. By the time you tire of the

SIZE UP YOUR ENEMIES, learn maps, and locate weapons in Spectator mode.

SUCKS TO BE THEM. Smaller levels get cramped and dangerous. Here, everyone except you meets a grizzly multiplayer death.

included levels, more will be available free online. As a test of your relative gaming skill, this is peerless stuff. Unreal Tournament may have the edge in options and complexity, but for fun, firepower, and visual splendor, Quake III is the clear leader. But here's the caveat, and it's a biggie: If you're expecting anything new in this version, you'll be disappointed. Quake III is very simply more of the same with better graphics, and that might not be enough to satisfy some.—*Frank O'Connor*

GOOD NEWS: Pretty, fun, and a perfect example of what a Mac can do graphically. **BAD NEWS:** More of the same. Limited single-player experience.

power play

What did you eat for lunch today—someone else's?
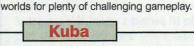
Games for Non-Quakers

Fun for the Thinking Crowd

Just because some of us have been killing every waking hour playing Unreal Tournament and Quake III Arena doesn't mean there aren't great games out there for non-twitch gamers—you know, the folks with higher brain functions and all that. So we've checked out three addictive games that will keep you entertained for hours without undue bloodshed—give your trigger finger a rest.—*DR*

TOO BAD BRITNEY SPEARS isn't on the receiving end of those Fireballs, but that's about the only thing missing from Ferazel's Wand.

THOSE STONE-COLD MARBLES are in position to deliver a cruel blow for Hal—poor, poor Dave.

I AM THE VERY MODEL of a modern *Toy Story*-style hero. Mighty Mike packs a suction-cup gun against a plethora of enemies—but it's all in fun.

Ferazel's Wand 1.0.2

$30—Ambrosia Software (http://www.ambrosiasw.com)
The latest game from Ben Spees, Ferazel's Wand, is backed by shareware stalwart Ambrosia. The game casts you as a magic-using Habnabit (a subterranean dweller, but nothing like CHUD—Cannibalistic Humanoid Underground Dwellers) named Ferazel who must avenge his friends, killed by evil forces. It seems the Dread Queen Xichra has told her minions, the Manditraki, to invade the underground caverns—which lands the Habnabits in deep trouble.

Ferazel's Wand plays like a fairly straightforward platform game, a mix of Mario Brothers and Sonic the Hedgehog. Players can leap from place to place, jump on swinging and rotating contraptions, swim in subterranean lakes, and fend off monsters while picking up treasure. As you progress through various levels in your quest to avenge friends and defeat the Dread Queen Xichra, you pick up new spells to help you along. Some are offensive (such as VBlade and Fireball), while others (such as Tree Trunk and Ice Wall) help you get where you're going. The game features 23 levels (only 3 are available in the demo version) spread throughout seven worlds for plenty of challenging gameplay.

Kuba

$15—Patch Products (http://www.patchproducts.com)
The name stands for Kleverly Unique, Brutally Addictive—and yes, we know that should be a C, but then you get Cuba, and then Congress has to get involved with sanctions, and nobody wants that. Kuba is a board game in which you push marbles around on a board in a bid to knock them off the playing field. Push enough marbles off, and you win the game.

Although it's simple to learn, Kuba is difficult to master. The computer player opened a couple cans of whoop-ass on us—it was an accomplishment to get *any* marbles off the board before the computer ended the game, decisively and brutally. If games like Reversi and Go fascinate you, you'll probably love Kuba. The demo version is limited to basic options, but it's enough to get the feel of the game—and find out if you want to plunk down the green to buy it. If you're really into the idea of playing against another human being, Kuba is networkable for your online gaming enjoyment.

Mighty Mike 2.0

$15—Pangea Software (http://www.pangeasoft.net)
Pangea Software recently reissued Mighty Mike, formerly known as Power Pete (a commercial game published by MacPlay). It's not just the same game with a new name—Mighty Mike features bug fixes and proper sprocket support so that it looks and plays better than the original.

The setting is a huge toy store (think FAO Schwarz). The Fuzzy Bunnies have escaped, and it's up to you as the heroic toy, Mighty Mike, to round them up, armed only with your suction-cup gun. It sounds pretty simple, but it seems a lot of other toys are a bit jealous of Mike's soaring sales, and they would love to see him disappear.

The toy store is divided into five different worlds. Pay the $15 shareware fee, and you can play all 15 levels instead of just the 3 offered in the demo version. There is some help available—Mike can pick up new weapons, and he is equipped with Bunny Radar to help him locate the cuddly little toys.

Up-and-Coming Games

More Big-Name Time-Wasters on the Way

Now that the Christmas gaming rush is over and all the games destined for the shelves have made it there, we're back to salivating over upcoming titles—some we've known about for a while now, and some we've just discovered. Here's the lowdown on what you can look forward to in the next few months.—*DR*

DIABLO II

(Blizzard, http://www.blizzard.com)
Anyone who has ever lost a day or week or month to the original Diablo had better run for the hills—Diablo II is coming, with a revamped user interface, new character classes, and tons of playable area. Blizzard says the game will be ready when it's ready—we're hoping that means this year.

DRIVER

(MacSoft, http://www.wizworks.com/macsoft)
On its way in March to the Mac straight from the Playstation, Driver puts you in the driver's seat (where else?) to explore rendered roads from actual cities (such as San Francisco), as you do your best to evade the law.

ONI

(Bungie, http://www.bungie.com)
Combining third-person hand-to-hand fighting with some first-person shooter elements, Oni is poised to blow away Lara Croft; it plays like an anime movie in which you control the action. Originally slated for late 1999 release, Bungie is now shooting for a release date this year.

WORMS ARMAGEDDON

(MacSoft, http://www.wizworks.com/macsoft)
Another console port due out this spring is Worms Armageddon, which promises to be great fun for those who like head-to-head play involving some heavily armed invertebrates.

SID MEIER'S ALPHA CENTAURI

(Aspyr, http://www.aspyr.com)
Probably available as you read this, Alpha Centauri promises to be the biggest Civilization-style strategy game to date, set in the future on a new world. You play the leader of a group of colonists intent on settling there. Diplomacy and combat come to the fore in this bad boy.

YOU'RE GONNA HURT your head if you try to figure out how to play Alpha Centauri in less than a day.

STAR TREK DEEP SPACE 9: THE FALLEN

(Simon & Schuster, http://www.simonandschuster.com)
Based on the Unreal engine, the August release of DS9 promises to give both Trekkers and non-Trekkers a great gaming experience with a revolutionary third-to-first-person camera system and individualized characters. Should be great!

BRIGHT BEAM, DARK BUGS—this combination of *Star Trek* and Unreal ought to be irresistible.

Screen Shot of the Month

AH, THE CLASSICS. It's a great Marathon moment, up close for all to see.

Artist's Statement
Honey, could you send my space suit to the cleaners again? Don't forget to tell them to clean the doo-doo out of my boots this time!
—*Gary Simmons*

Keep your screen shots coming—we love seeing what you've been up to. Send them to letters@macaddict.com.

how to

FKey Follies and a Portrait of Our Artist on a Young Mac.

Paint a Portrait Using Studio Artist

by David Reynolds

EASY

So you want to create a masterpiece painting of a friend (preferably something worthy of hanging on the wall), but you're the artistic equivalent of George Mallory on Everest—dead in your tracks. Since you *are* godlike when it comes to your Macintosh, however, there is a way around your conspicuous lack of artistic skills: Studio Artist. This wonderful application ($295, Synthetik Software, 415-864-6582 or 888-808-4188, http://www.synthetik.com) is different from most paint programs. Instead of simulating natural media (such as brushes and pens), Studio Artist applies the principles of audio synthesis to the realm of graphics, helping you synthesize works of art. In other words, Studio Artist does much of the work for you—all you have to do is tap into your inspiration.

We'll take a decent photograph of your portrait subject and show you how to make it into a finished image that looks as though someone with an ounce of talent rendered it, and it won't even hurt—too much. All you need is a copy of Studio Artist, a photo (either film or digital) of a person you want to immortalize for all time, and a Mac. It wouldn't hurt to have access to Photoshop or some other image editor for postproduction work, but if you don't, it's no biggie. Talent is, fortunately, completely optional.

WE'LL MAKE YOUR PHOTO a masterpiece in six steps.

TOUGH
This stuff's for the pros.

TRICKY
It'll take some effort, but you can do it.

EASY
The fundamentals, if you will.

TIP! Studio Artist (like some other image editing applications we can think of) is a memory hog, so give it as much RAM as you can spare. Otherwise, you'll face slowdowns and errors.

1 Pick Your Portrait

To get started, pick a picture that features your subject up close and personal. You'll want to show as much of the subject's face as you can, so zoom in fairly close when you snap the shutter. Otherwise, Studio Artist will blur the detail of the person's face, and you'll end up with a *very* abstract image. Scan the image (if it's a photo) at a reasonably large size, but don't go overboard: a 5MB TIFF file (around 1000 by 1000 pixels at 72 dpi) is about right. Don't worry about making your source image resolution *too* high—Studio Artist will take care of creating the finer details. Create a folder for your image and drop it in there.
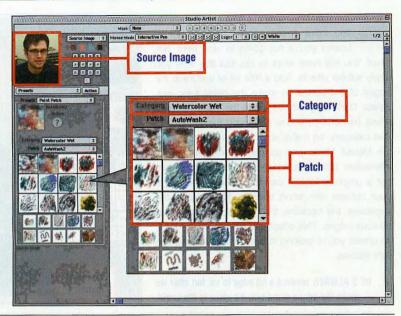
MACADDICT **ART DIRECTOR David Ross
will serve as the subject of our portrait,
and he's thrilled to be here.**

2 Prepare the Canvas

Launch Studio Artist, and select the source image from Step 1. The program will ask what size image you want to create. Unless you have a good reason for creating a larger image (for instance, you *really* want a wall hanging), leave these settings as they are—you'll avoid having to go out and buy more RAM. Once the image loads, you'll see a blank canvas. Click the plus or minus buttons in the upper left corner until the entire canvas fits inside your window. You're ready to start painting!

HERE'S YOUR STARTING POINT for making a piece of art worthy of hanging. You'll use the category and patch controls shown here in the next few steps.

Source Image

Category

Patch

3 Create the Background

To begin creating your portrait, you'll borrow a painting technique. Use Studio Artist's presets to paint the background layer first, and then add detail where needed. It's a good idea not to mix media too much, so stick with wet paints and watercolors throughout. Select Watercolor Wet from the Category pop-up menu and select the AutoWash2 patch. Click the Action button, and Studio Artist begins to daub your canvas with splotches of watercolor-like color. Let this go on for a while—it might take 15 or 20 minutes, depending on the speed of your Mac—until you get a complete image with paint daubs everywhere. To stop the process, just click the screen. This will serve as your background.

NOW WE'RE GETTING somewhere. There's already a vague resemblance to our subject, and we've done no more than click a single button.

AutoWash2

4 Fill In the Middle

Now that you have a background for your painting, it's time to fill in some of the details. You'll use the Autodraw Interactive mode to do it. But first, use a different paint patch to add more texture and detail in the subject's face. Select the Watercolor Wet Splatter patch from the Patch pop-up menu. Then select Autodraw Interactive from the Mouse Mode pop-up menu along the top. Using your mouse (or a graphics tablet pen, if you have one), sketch the subject's face and any other area in the foreground of the picture that needs some detail. Pay close attention to the eyes, the nose, and the mouth—these need to pop a bit to make the portrait recognizable.

DAVE'S FACE is showing through here in its stylized way, and we're all relieved. He was beginning to creep us out.

Watercolor Wet Splatter

5 Edge the Portrait

You have a reasonable portrait, but of course you're not going to stop here. No, siree! You still have work to do, but this time you apply subtler effects. Add a little bit of texture to the edges of the portrait to make the detail jump out. Select DarkeningTexture1 from the Patch pop-up menu (remember, you're still using the Watercolor Wet category, so make sure that's selected). From the Mouse Mode pop-up menu, select Autodraw Interactive. Using the mouse (or your pen if you've got a graphics tablet), carefully trace the edges of your subject with short strokes. Move along the shoulders, the neckline, the hairline, and any other obvious edges. This effect can be easily overdone, so unless you're looking for exaggerated detail, use light strokes.
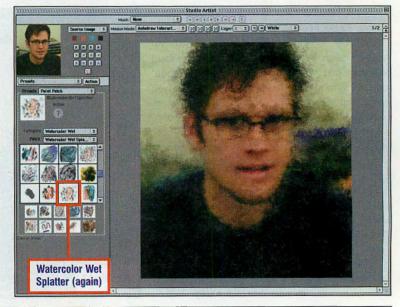
HE'S ALWAYS seemed a bit edgy to us, but after we make the edges stand out, it's clear to the world.

Darkening Texture 1

6 Finishing Touches

Now it's time to clean up problem areas, such as a stray paint stroke or white patch, and add the finishing touches. If the image lacks style, this is also a good time to jazz things up. You'll clean up stray strokes with a tool you used earlier. Select Watercolor Wet Splatter from the Patch pop-up menu, and make sure that Autodraw Interactive is still selected in the Mouse Mode pop-up menu. Trace over problem areas with the mouse—the Autodraw feature does the rest. Save your final image as a PICT or JPEG if you're going to print it out directly, or as a Photoshop document if you plan on taking it to postproduction. Presto! You're done.

DAVE'S PORTRAIT IS GOOD enough to frame, now that we've added the final touches.

Watercolor Wet Splatter (again)

David Reynolds is too busy testing products for *PowerPlay* to have a life, much less a bio.

Postproduction

Sometimes it's not enough to create a brilliant work of art with a graphics synthesizer—you just *have* to munge it a bit in a photo editor. Here's a look at three of our favorite Photoshop effects to make your art more enticing.

BY APPLYING THE UNSHARP MASK FILTER with a 500 percent value and a radius of 73 pixels or so, you'll get vibrant colors that look like paint, not watercolor.

APPLY THE CRAQUELURE filter with a crack spacing of 25, a crack depth of 4, and a crack brightness of 8 to give your portrait an old-world feel. Sure, it's mixing media, but who cares?

SET THE UNSHARP MASK FILTER to 500 percent again, but leave the radius at 1 pixel. The picture will *jump* with texture.

Utilize Your Function Keys with Mac OS 9

by Ian Sammis

EASY

In a strange holdover from the dark days of character terminals, nearly every computer still has a strange row of keys lurking above the numbers. Called *function keys*, these 12 mysterious buttons traditionally served a mere handful of users who wanted to emulate 20-year-old systems. Despite their obscurity, these keys have persevered, and every new Macintosh still includes them.

Now Apple, with the release of Mac OS 9, has finally given the function keys a *raison d'être*, rescuing them from their deep existential malaise. On computers with built-in USB (this is the case if your original keyboard has translucent keys), Mac OS 9 lets you specify actions for the function keys. You can use them to launch programs, open documents, and connect to servers.

With a minimum of work, your function keys can save you a great deal of time. Here's how to get started with some function key mayhem.

ILLUSTRATION BY CLAUDIA NEWELL

WHAT YOU WILL NEED
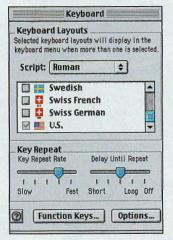
- Mac OS 9
- A USB-based Macintosh (It's the motherboard that matters, not the presence of USB, so an older Mac with a USB card won't work.)

1 Open the Keyboard Control Panel

Under the Apple menu, open the Keyboard control panel (in the Control Panels submenu). Along with the controls for setting your keyboard type (useful to fans of the Dvorak keyboard), you should find a button labeled Function Keys. If that button isn't there, your computer doesn't have on-board USB; you'll need QuicKeys or some other third-party utility to use your function keys (see "Power! I Need More Power!", p72).

MAC OS 9 ADDS a new button at the bottom of the Keyboard control panel that lets you program your function keys.

THE KEYBOARD CONTROL PANEL didn't get much use until Apple released Mac OS 9, unless you worked in languages with non-Roman alphabets. If you've forgotten where to find it, it's wedged between the Internet and the Keychain Access control panels.

2 Push the Function Keys button

When you click the Function Keys button, it presents a list of the 12 function keys found on Apple's USB keyboards. Initially, none of these has an assigned function. At the bottom of the window you'll see a Use F1 Through F12 As Function Keys check box. If you already use the function keys in some of your other programs, you should select this box; it requires you to hold down Option to trigger the function keys' special uses, leaving them free for other purposes in various programs.
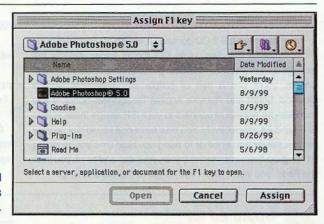
TWELVE KEYS, NO ASSIGNMENTS: This is the sort of window Mac power users (or is that Power Mac users) love.

3 Your Favorite Applications

To get started, define the F1 key to launch one of your most frequently used applications. Click the onscreen F1 button. In the dialog box, select a file to assign to F1. Find an application you frequently use (we chose the perennial favorite, Photoshop), then click the Assign button. That's all there is to it! Pressing the F1 key (or Option-F1 if you clicked the check box in the previous step) opens Photoshop (or brings it to the front if it's already open).

JUST CLICK ASSIGN, and from now on Photoshop will launch (or move to the front of the screen if it's already open) when you press the F1 key.
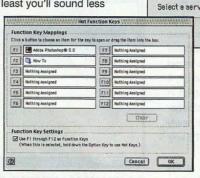
4 The Oft-Used Folder

Most of us make some effort to organize our hard drives. We're so used to our personal organizational schemes that we don't realize just how ludicrous they are until we have to explain them—for example, over the phone to a colleague: "Just go into the Documents Folder...now the Stuff folder...then the New Stuff folder...then into Late Stuff...then into How-Tos...then into Desperation..."

The function keys can provide an easy way to jump to important points in your file system. Granted, they won't make you any more organized, but at least you'll sound less silly over the phone.

Click the F2 button in the Function Keys window. This time, select a folder you use frequently and click Assign. Now you've got a shortcut that takes you directly to that folder. As an added benefit, it also moves the Finder to the front of the screen, which can come in handy if you're someone who runs tons of apps simultaneously.
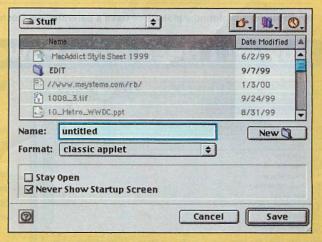
BY ASSIGNING A KEY to a folder, you create the quickest shortcut imaginable—just clicking the appropriate function key opens the folder.

HERE'S A GOOD START to getting organized—you've assigned F1 and F2, a basic use of the function key assignments.

AppleScript Applets and Function Keys

While the most neophyte power users will find function keys useful, the AppleScripters out there are probably working out improbable schemes combining function keys, AppleScript over IP, ADB and I/O, and several small bowls of flavored gelatin. If you've got such a scheme in mind, here's how to make it a reality.

Write the AppleScript to accomplish your goals. Choose Save As from the File menu. In the dialog box, choose Classic Applet (or if you're feeling adventurous, choose Mac OS X Applet—it won't make the slightest bit of difference until Mac OS X comes out). Make sure to click the Never Show Startup Screen button as well—otherwise every time you try to run the script, you'll see a question in a little window, asking if you want to run the script or edit it. Once you save the script, it runs when you open it, and once you assign it to a function key, you can try to outdo Rube Goldberg (if you're of a more practical bent, you can add useful functionality to your system—weirdo).
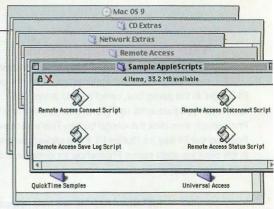
WHEN YOU NAME and save your script, it's ready to run at the press of a function key.

5 The Remote Connection

The Mac OS 9 CD contains a wealth of random though useful little files in its CD Extras folder. Among the strange and mysterious desktop pictures and obscure control panels, you'll find a pair of scripts called Remote Access Connect Script and Remote Access Disconnect Script. If you use Remote Access to connect to your ISP, assign these scripts to F3 and F4, respectively. You now have one key to dial up your remote server and another to hang up. Next time you're racing to hang up before someone traces your call and turns you in to the Feds, you won't even have to get to the Control Strip!

YOU'LL FIND ALL SORTS of interesting items buried in the depths of the CD Extras folder on the Mac OS 9 CD. Some, like these AppleScript applets, come in quite useful.

6 Apple Adder

In your Apple Extras folder, you should find an AppleScript folder, which in turn contains an Automated Tasks folder. Assign F5 to the Add Alias To Apple Menu task. Now, anytime you want to add an item to your Apple menu, just select the file you want, then press the F5 key.

ADD ALIAS TO APPLE MENU, a compiled script that comes with OS 9, works extremely well as a function key assignment—at the press of a key, your selection appears in the Apple Menu.
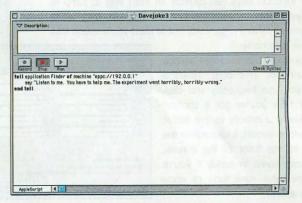
7 Practical Jokes

It's April, so it wouldn't seem right to end this how-to without at least mentioning a good April Fools' joke. If you have AppleScript over IP and you can sucker someone into giving you an account with a program that links to their machine (or if you can quietly give yourself one when they aren't looking), the function keys can trigger a bit of harmless amusement. The script shown in this step (with the IP address changed to that of your victim's machine) causes the target machine to speak unexpectedly (in the case of this script, it abruptly cries out for help). Type your practical joke script in the Script Editor, then save it as an applet (see the sidebar "AppleScript Applets and Function Keys"). Assign the newly compiled applet to F6. Now, whenever you press your F6 key, the victim's computer will beg for help!

As with all practical jokes, if you play this one at the wrong time, the humor is likely to escape its target. Make sure your joke is well timed and nondestructive—otherwise you're likely to lose friends permanently instead of cracking them up.

THE SUCCESS OF A PRACTICAL JOKE like this one depends largely on timing—even the funniest joke isn't appropriate when your victim is struggling to meet a deadline. Assigning the script to a function key lets you play a joke at just the right moment.
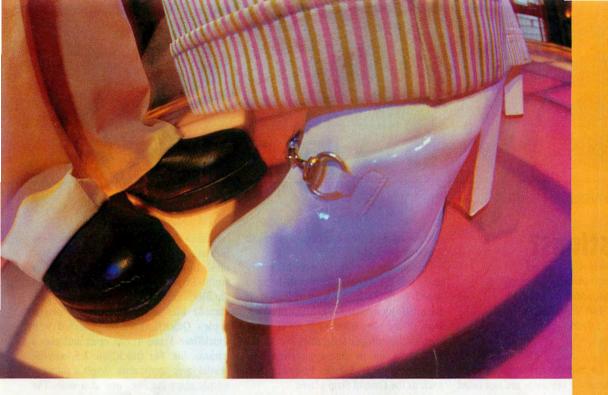
Ian Sammis is profoundly jealous of Dave's parenthetical "technology."

Power! I Need More Power!

The ability to assign tasks to function keys in Mac OS 9 is a useful addition to the operating system. For the diehard function-key fanatic, though (or for that matter, the newbie with a beige machine), the new feature doesn't even come close to the power of QuicKeys (CE Software, http://www.cesoft.com, $99.95). QuicKeys is a fully functioning macro recorder and replayer—use it to assign hot keys to almost any task you can perform with the mouse and keyboard. Make key combinations specific to individual applications or share them universally. If you're looking for the be-all and end-all of macro programs, QuicKeys is it.

QUICKEYS GIVES THE POWER USER a very powerful tool for constructing and assigning keyboard macros.

ask us

Ask us your questions, we'll tell you no lies.

Questions?

Submit technical questions or helpful tips directly via email (askus@macaddict.com) or c/o MacAddict, *150 North Hill Dr., Brisbane, CA 94005.*

FIND SMART SCROLL 3.6b6, Audio CD Labeller 1.01, Net CD 1.6.7, an Audion 1.2 demo and Arnold's MIDI Player 2.9b11 on The Disc.

Q When I'm listening to CDs on my computer, the names of the songs are just listed as Track 1, Track 2, Track 3, and so on, and the CD shows up as Audio CD 1. Is there a way to have them show up with the actual song titles and the CD's title?

A Apple's AppleCD Audio Player lets you type in specific track and CD info, making it available every time you insert the CD. (This information is stored in a file called CD Remote Programs in your Preferences folder.) The problem is, it's time consuming to type in song titles for lots of CDs. A group of people who started the CDDB (http://www.cddb.com) in the early 1990s addressed this problem by creating an Internet-accessible CD database that contains information and song titles for thousands of CDs. The information is available to anyone, and the easiest way to get to this vast database is to use the freeware Audio CD player called Net CD

(http://macinsearch.com/users/tobyrush/software/netcd.html).

Simply insert a CD into your CD player and click the Connect button to begin a search in the CDDB for a matching CD. If the application finds a match, it will download all the song titles for that CD. From then on, the proper song titles for the CD will show up in any application that accesses the CD Remote Programs file, such as the Control Strip player.

As for having the CD icon show up with the title of the CD instead of Audio CD 1, you need a different piece of free software called Audio CD Labeller. With CD Labeller installed, your CDs will show up with the title you have entered into the AppleCD Audio Player or the title found in the CDDB.

Q Is there a way I can set up my Macintosh to act as a karaoke machine? We're having a party and would love to have some karaoke as entertainment.

A You betcha! Nothing is more fun than belting out the classics and playing the star of the show. You can set up your own karaoke system with any Macintosh computer that has at least QuickTime 2.5 installed. Of course, you will also need some karaoke song files to play. These files end with the .kar suffix and are actually just MIDI files with an extra text track that includes the lyrics. You can find karaoke files on the Net by doing some simple Web searching, or better yet, check out the MIDI Farm for lots of free downloadable songs (ftp://ftp.midifarm.com/pub

/midifiles/karaoke). Be aware that these files are zipped, not stuffed like most Mac files. However, most recent versions of StuffIt Expander can successfully expand Zip files. Once you have downloaded some karaoke files, all you need is a player. Apple's QuickTime Player, installed with QuickTime 3 and 4, can open and play a karaoke file. For QuickTime 2.5, use the MoviePlayer application. Apple's software simply plays the files one at a time. The ultimate piece of software for karaoke is Arnold's MIDI Player, which offers a much more robust experience. This amazing application lets you set up a folder for your files and then play them back full screen. Just follow along with the words!

Q I've created a small Ethernet network in my house. How can all of my computers share one modem for simultaneous Internet access?

A Internet network-sharing is becoming more common as computers become more affordable. It is not uncommon for a Mac user to have two or three Macs around. Internet access is the highest priority for most users, and having more than one computer often requires setting up Internet connections on multiple computers. Lots of users now enjoy the benefits of broadband access via cable modems or DSL lines, but the dial-up connection via modem is still the primary method for accessing Internet services. Therefore, it is desirable to have a method of connection that allows more than one computer to use the same modem simultaneously.

Shared modem Internet access is most effectively accomplished with a software router. This means dedicating one computer to providing access for the rest of the network. That computer has the modem and connects to the Internet, and the others connect to it. This enables the main computer to obtain a single address from the ISP, then create more addresses for the rest of the network.

NO MORE GUESSING which song is on Track 4—the Internet's CDDB knows.

We are the champions my friends
And we'll keep on fighting till the end

(We are the champions)

JUST FOLLOW ALONG with the words—perfect karaoke on your Mac!

The two most popular software router solutions are IPNetRouter (Sustainable Networks, http://www.sustworks.com, $89) and Vicom Internet Gateway (Vicomsoft, http://www.vicomsoft.com, $280). Both of these products allow one computer to connect to the Internet via a dial-up connection, then share this connection with the rest of the network. Both work well—the IPNetRouter is less expensive, but it's also a little more complicated to set up. For software routing to work well, the computer running it shouldn't do anything else, which means you have one less computer available for use on your network.

Another, and potentially better, solution (though a more expensive one) is a hardware router, such as the NetGear (http://www.netgearinc.com) Modem Router RM356, which has an integrated 56-kbps modem and costs about $300. We haven't used it and don't know how well it works. We're sure we'll see many similar solutions in the near future.

Q I just recently upgraded my computer from a tired old Windows PC to a new iMac. I've learned a lot about using it by trial and error, but my new computer didn't come

🍎	File	Edit	View	Special	**Help**
					Help Center
					Show Balloons
					Mac Help ⌘?

NEED HELP with your computer? The answer might be right here.

with a manual! Where is a manual to help me learn how to use my wonderful new machine?

A Apple includes very little printed documentation to help you with your computer, and in the past few years the company has been moving its user guide information onto the computer itself. This way, if you ever upgrade your computer's operating system, you get updated help information as well.

Since the release of Mac OS 8, Apple has included the Mac OS Help Center, accessible via the Help menu in the Finder. This tremendous resource is searchable and interactive. In fact, Apple's Help Center can answer some of the questions we receive here at the *Ask Us* headquarters. The Help Center is a resource we should all to use more often, because the more we use it, the better Apple will make it.

Q I recently overheard my school's technology coordinator talking about our computer network. She mentioned a program called Macintosh Manager. What is this and what does it do?

A For many years, Apple maintained a software program called At Ease. This client-server system enables network administrators to control their computing environment. Users log in to any computer on the network for access to their documents and programs. This software was and still is tremendously popular in the

education market. It is easy to set up and maintain, and it works on just about any Mac you can throw at it. The most recent version is At Ease for Workgroups 5, but unfortunately this is the last version. Apple is no longer updating or supporting the Workgroups 5 version for compatibility with its most recent computers, such as the G4 or iMac DV.

To replace At Ease, Apple introduced its successor, Macintosh Manager, in the release of Mac OS X Server a little over a year ago. At that time, Macintosh Manager worked only with Mac OS X Server and Mac OS 8 clients. The program is now the only At Ease-style Apple solution *for new* Macintosh computers. Apple has reduced the system requirements so older computers can run this software as well—it now requires at minimum an '040 processor and System 7.6.1. The latest server end works with AppleShare 6.3 or greater. It also integrates many of the Mac's newest features, such as NetBoot and Mac OS 9's Multiple Users.

Many may mourn the end of At Ease, but when all is said and done, Macintosh Manager is much more useful. For a tremendous amount of information about this software, check Apple's Web site.

Q Can I use a PC 3dfx card in my Mac for better 3D performance in my games?

A As long as your computer has an open PCI slot, you can install any 3dfx card and it will work. 3dfx cards are based on different chip sets, called Voodoo 1, 2, or 3. As the numbers increase, the chips can handle more and do it faster. Each of these different chip sets requires specific driver software. The 3dfx company recently released Macintosh driver software for all three Voodoo chip sets. If you buy an off-the-shelf PC 3dfx card, you should know that it will not include any software for your Mac. You will need to download the software yourself from http://www.3dfxgamers.com. If your monitor does not have a VGA connector, you may also need an adapter to connect your monitor to the card. These Mac-PC monitor adapters are available at most computer dealers as well as from Griffin Technology (http://www.griffintechnology.com). For lots of Mac-specific 3dfx information, including info about AGP, check the Web site (http://www.mac3dfx.com).

Buz Zoller is a technology support specialist for a school district in Texas. The eyes of Texas are upon you...

The Speedy Scrolling Saga Continues!

In the February *Ask Us* column, I discussed options for slowing down menus and scrollbars. The options were very few, but now you have another way to slow down those menus and scrollbars—a new version of Marc Moini's wonderful utility, Smart Scroll (http://www.marcmoini.com). Moini has released a version that allows you to throttle

AT LAST, AN OPTION to let you slow down speedy menus!

down the scroll speed of menus as well as scrollbars. Drop by his Web site, download the software, pay the shareware fee, and send him a nice note thanking him for his excellent work!

Note: Please keep in mind that any Web site referenced in the *Ask Us* column is run by someone completely unaffiliated with *MacAddict*. These sites can be unreliable. This holds true for many shareware and freeware products as well. Please accept our apology if you ever find they're not available.

In the January *Ask Us* column, we discussed enabling Macintosh services on a Windows NT server so that Macs could access files. Another possibility came to our attention—a client-side option that requires nothing extra on the server side. This software solution, called DAVE, comes from Thursby Software Systems (http://www.thursby.com). Better yet, you can test an evaluation version, available on the site. Drop by and give it a try.

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And the BSD Crowd Screams in Agony

" **It's very Linux-like—it's *very* Linux-like. It's got FreeBSD in it, which is the same as Linux.** "

—Steve Jobs during January's Macworld Expo keynote, explaining that Mac OS X features BSD Unix within its architecture. If by "the same as Linux," he meant "bearing no relation to Linux other than a similar command set," he was right.

America Online's Hunger Unabated

A fter watching America Online devour media giant Time Warner, we came up with a list of five acquisitions we would like to see America Online choke down.

- **MICROSOFT**—Why not go for the jugular and own the world outright?
- **MCDONALD'S**—Instead of "You've got mail," the mail notification sound would be "You want fries with that?"
- **AMWAY**—The marketing scheme seems like a good fit. Plus, the influx of cleaning products would allow proper couring of online content.
- **STARBUCKS**—Ubiquitous stores make a great place to distribute ubiquitous CDs, and the caramel macchiato is delicious.
- **APPLE**—Isn't it obvious? The two Steves, together again for the first time!

MacAddict Corrections

+ We mistakenly reported that Steve Jobs, during Macworld Expo, demonstrated Apple's "Fishnet Strategy" in which marketing executive Phil Schiller would wear long stockings and a garter belt. We regret the error.

+ Last issue, we left most of our good jokes at home in the closet, and we forgot to put them in the issue. While we regret the error, we're selfish slobs, and we're not going to let you have them. So there.

+ In an attempt to build a singularity reactor, Associate Editor Ian Sammis inadvertently turned off the magnetic field keeping the micro black hole afloat, allowing it to plummet to the center of the earth, where it's eating away at the planet's core. Ian feels very, very bad.

+ On page 167 of the February issue, we meant to run an article detailing Apple's product strategy for the next five years. Instead, we published an article on the seven things a rat terrier can do to make your Mac run faster. While we're just sick about the error, we really like the dog.

FITZPATRICK THE RAT™

Panel 1: I CAN'T BELIEVE THIS...

Panel 2: THE GUY IS EVERYWHERE!

Panel 3: JUST GOT BACK FROM THE GROCERY... GUESS WHAT I BOUGHT... / DO TELL...

Panel 4: LETTUCE 2000. / GOSH. I HOPE IT DOESN'T CRASH MY CROUTONS...

Visit the Fitzpatrick archive at http://www.insanely-great.com/comic/index.html. BY CHUCK DOWNS

The Seven Deadly Macintosh Sins:

Software Conflicts

Memory Problems

Viruses

Hardware Problems

Access to your Network has been interrupted!

OK

Network Problems

Disk Damage

Damaged Software

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- The most comprehensive troubleshooting utility available

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When good Macs go bad and fall from grace, it's good to know there's help nearby. Salvation is only a mouse-click away with the new TechTool Pro 3. Now featuring virus protection and conflict detection, TechTool Pro is the only program you need to help abolish the evil forces that have possessed your Macintosh. TechTool Pro 3 checks more aspects of your Macintosh than any other utility available. Period. Besides repairing and recovering damaged drives, eradicating viruses and catching the occasional software conflict; you can also test all those other critical parts of your system that other utilities simply ignore. Like RAM, logic board components, floppy drives, scanners, modems, internet connections and so much more. TechTool Pro even supports technologies like System 9.0.1, "Pure" HFS+, Firewire and USB drives, and all of the latest Macintosh models.

TechTool Pro can also help you in between times of trouble. Our disk and directory optimize features can help improve the performance of your Macintosh as well as help circumvent problems before they happen. The TechTool Protection control panel will regularly check your system so you don't have to. It will also back up critical directory data, so if something goes wrong, you'll be up and running in no time flat.

But just because TechTool Pro is the most advanced Macintosh troubleshooting utility available doesn't mean that it has to be difficult to use. Our easy-to-use interface makes checking and fixing your Macintosh as easy as pressing one button. For advanced users, expert access allows you to control and configure TechTool Pro in almost any way you wish.

So if Macintosh troubles are turning your life into a living Hades, check out the tool of the trade: TechTool Pro. After all, you have the most powerful computer in the world. Shouldn't you be using the most powerful utility?

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